Super Energy Savings Performance Contract
Delivery Order Guidelines
for
Southeast Region All-Purpose Super ESPC
and
GHP Technology-Specific Super ESPC

Version 3.0

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Contents

Abbreviations and Acronyms

CO	Contracting Officer
COR	DOE Contracting Officer's Representative
DES	Detailed Energy Survey
DO	delivery order
DOE	U.S. Department of Energy
DOSD	Delivery Order Selection Document
ECM	energy-conservation measure
EPACT	Energy Policy Act of 1992
ESCO	energy service company
ESPC	energy savings performance contract(ing)
FAR	Federal Acquisition Regulation
FEMP	Federal Energy Management Program
FSN	FEMP Service Network
FY	fiscal year
GHP	geothermal heat pump
HVAC	heating, ventilating, and air conditioning
IAG	Interagency Agreement
IDIQ	Indefinite-delivery, indefinite-quantity (contract)
M&O	management and operating (contractor)
M&V	measurement and verification
MOU	Memorandum of Understanding
O&M	operations and maintenance
PF	FSN Project Facilitator
PM	DOE Program Manager
RFP	Request for proposal
SDP	Site Data Package
STR	Site Technical Representative
USC	United States Code

1. Introduction

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1. Introduction

1.1 PURPOSE OF THE GUIDELINES

The purpose of the Super Energy Savings Performance Contract (ESPC) delivery order *Guidelines* is to provide federal agencies with guidance in using the Department of Energy's (DOE's) technology-specific and regional "all-purpose" Super ESPCs. The *Guidelines* serve as an introduction and reference to information that agencies will need in the process of issuing delivery orders to the Super ESPC prime contractors, referred to here as energy service companies (ESCOs) or contractors.

The *Guidelines* interpret the statutes and rules that authorize ESPCs, including the National Energy Conservation Policy Act (NECPA, as amended in 1988), as amended by the Energy Policy Act of 1992 (Pub. L. 102-486) and codified into regulation as the DOE Final Rule (10 CFR Part 436).

1.2 BACKGROUND

The DOE Federal Energy Management Program (FEMP) ESPC programs were created to help federal agencies improve energy efficiency in their facilities and reduce their energy costs. The Super ESPC is a streamlined, broadened, and more flexible version of earlier energy savings performance contracts that is designed to simplify the ESPC process, reduce the time required to implement energy-savings projects, and increase the number of energy savings projects accomplished. Super ESPCs have already been awarded to the prime contractors in compliance with federal regulations, allowing the agency to bypass cumbersome procurement procedures and move directly toward issuing a delivery order for an ESPC project. This streamlined process of gaining access to the expertise and private financing offered by ESCOs significantly reduces the time and effort required to implement ESPC projects.

1.3 WHY USE A SUPER ESPC?

Any energy project, accomplished by any means, is an undertaking that demands considerable investment of an agency's time and resources, and a Super ESPC project is no exception. However, Super ESPCs offer agencies a useful alternative that specifically addresses the needs of organizations in the federal sector.

1.3.1 Financing Provided and No Up-Front Capital Costs

The feature of Super ESPCs that is often the primary draw to agencies is their capability to finance energy-savings projects without new appropriations and their guarantee of cost savings. The ESCO provides all labor, materials, equipment, and engineering design for improvement projects to reduce energy costs and energy-related operations and maintenance expenses. The only up-front cost to the agency is for acquisition team staff time and technical assistance, and the latter can be spread over five years if necessary.

The contracts require the ESCOs to finance and implement energy-conservation measures (ECMs) for their agency customers and guarantee that these improvements will result in a specified level of annual cost savings. In return, the ESCO receives firm fixed-price payments from the guaranteed cost savings. The ESCO and the customer agree on annual payments that are less than the cost savings guaranteed for the year, structuring a delivery order project with a long enough term to ensure that the savings are sufficient to pay the ESCO for its work. (See Chapter 2 for more information about the financial structure of Super ESPC delivery orders.)

1.3.2 Streamlined and Accelerated Process

Another advantage of Super ESPCs is that their simplified and streamlined procurement process can save agencies time and money. Under the Super ESPC programs, indefinite-delivery, indefinite-quantity (IDIQ) prime contracts were awarded to a number of ESCOs through a competitive process. The competing ESCOs were evaluated based on demonstrated capabilities to manage the development and implementation of multiple ESPC projects over a large geographic area and technical approach and price for a defined site-specific project.

The prime contracts awarded to the winners establish the general scope of work, terms, and conditions for firm fixed-price delivery orders for performance-based energy-savings projects at federal agency sites. With these contracts in place, the lion's share of the procurement process is already done. In a fraction of the time it takes to develop a stand-alone ESPC, federal customers can place and implement delivery orders and begin to see energy and cost savings accrue. The process to put a typical stand-alone ESPC in place can take 2 to 3 years, whereas awarding a Super ESPC delivery order can be completed in 4 to 12 months, if agencies are wholly committed to accomplishing a project. This translates into significantly less acquisition team staff time being required to implement an ESPC project.

1.3.3 Qualified and Motivated ESCOs

The competitive selection of the Super ESPC prime contractors works to the advantage of agency customers. These ESCOs are heavily invested in the Super ESPC program and are driven to work hard to satisfy the customer by their motivation to earn repeat business. To provide positive reinforcement to this motivation, DOE tracks ESCO performance, making evaluations and performance data available to agencies considering their choices of ESCO partners.

DOE/FEMP has built many protections for agencies into the IDIQ contracts, and the ESCOs bear a much higher degree of risk in a Super ESPC than in a conventional contract. Super ESPC prime contractors have agreed to the terms of the IDIQ contracts which specify that delivery orders issued against the Super ESPCs are not subject to protest procedures. Any necessary complaint resolution is handled by an ombudsman appointed by the head of the ordering agency and DOE. Further, the contracts provide off-ramps for agencies in the event that these are needed to strengthen the agency's negotiating position prior to award or to provide an exit strategy thereafter.

1.3.4 Assistance Available from FEMP Service Network

A resource that is used to great advantage is the considerable technical and procedural expertise that FEMP brings to bear to assist agencies using the Super ESPCs. The FEMP Service Network (FSN) assigns a Project Facilitator to every project to guide the agency through the Super ESPC process and to coordinate technical assistance to the agency. FSN's assistance can significantly lighten the task load on agency staff of developing a project and, when used well by the agency, is a critical factor in keeping the project on track and on time.

With experience, the tasks and interactions required to develop and implement Super ESPC projects have become a well-defined but flexible process that can minimize costs and expedite the work necessary to begin realizing energy and cost savings as quickly as practicable. The assistance provided by FSN has evolved into standard sets of basic and optional services defined by the project facilitators' and agencies' experience with Super ESPC projects. Services may be brief consultations or extend to full turnkey performance, depending on the agency's circumstances. (See Chapters 3 and 4.)

A wide range of tools, informational resources, and training materials are available to agencies. For example, models and templates are provided for nearly every document required in the process. The prescriptive format for the delivery order request for proposal (DO RFP) is particularly useful, listing all contract clauses that may be modified to incorporate agency- and site-specific requirements into the contract. Sources of information are listed in section 1.6.

1.4 "ALL-PURPOSE" AND "TECHNOLOGY-SPECIFIC" SUPER ESPCS

DOE FEMP has established two kinds of Super ESPCs. The entire United States, the District of Columbia, and all U.S. territories are covered by regional "all-purpose" Super ESPCs and national technology-specific Super ESPCs for several selected technologies.

1.4.1 Regional Super ESPCs

Regional Super ESPCs are intended for implementing energy projects based on a wide variety of tried and true ECMs in designated technology categories. ESCOs awarded regional Super ESPCs have demonstrated the capability to provide performance-based energy projects in the following technology categories:

- Boiler improvements
- Chiller improvements
- Building automation systems/energy management control systems
- HVAC (not including boiler, chiller, and EMCS)
- Lighting improvements
- Building envelope modifications
- Hot water and steam distribution systems
- Electric motors and drives
- Refrigeration
- Cogeneration systems
- Renewable energy systems
- Electric distribution systems

1.4.2 Technology-Specific Super ESPCs

Technology-specific Super ESPCs were developed to emphasize selected new and emerging technologies in federal energy-efficiency projects and foster their acceptance in

the market as mainstream technologies. All delivery orders under technology-specific Super ESPCs must include the designated technology. This motivates the ESCOs holding the contracts to find pay-from-savings opportunities for the designated technologies. Generally only a modest number of projects can be implemented before the ordering period or capacity of the contract(s) expires. FEMP uses this project experience to develop the information, tools, and guides necessary to ensure that the technology continues to achieve its federal market potential thereafter, by being integrated into projects financed with appropriations, regional Super ESPCs, or utility energy services contracts.

National technology-specific Super ESPCs are in place for geothermal heat pumps, solar concentrating troughs, and photovoltaics. FEMP may implement other technology-specific Super ESPCs as time goes on.

ESCOs awarded technology-specific Super ESPC contracts demonstrate the ability to furnish performance-based energy projects centered on the primary technology and to furnish ECMs in associated technology categories. The contracts allow associated ECMs to improve project economics through bundling. For example, the associated technology categories for the Geothermal Heat Pump Super ESPC are as follows:

- Building Automation Systems (BAS) /Energy Management Control Systems (EMCS)
- Lighting Improvements
- Building Envelope Modifications
- Electric Motors and Drives
- Appliance/Plug Load Reductions
- Central Utilities Modifications
- Energy Cost Reduction Through Rebates and Rate Reduction

1.5 WHO IS ELIGIBLE TO USE SUPER ESPCS?

Federal agencies with government-owned facilities in the United States, the District of Columbia, and U.S. Territories may use Super ESPCs to implement energy-savings projects. Before an agency may issue a delivery order under a Super ESPC, it must sign two agreements with DOE: a Memorandum of Understanding and an Interagency Agreement. Templates for the agreements are provided as Attachments 1 and 2.

1.5.1 Memorandum of Understanding (MOU)

A Memorandum of Understanding (MOU) between DOE and the ordering agency establishes the roles and responsibilities of DOE and the agency throughout the delivery order process. The MOU also obligates the ordering agency to provide information to enable DOE to keep records on and evaluate the use of Super ESPCs and the ESCOs' performance. This agreement must be signed and accepted before the agency may use a Super ESPC.

Agencies are encouraged to enter into MOUs with DOE at the agency level. An MOU between DOE and the agency's headquarters enables all agency sites to satisfy the MOU requirement by submitting a letter referencing the agency-level agreement between DOE and the agency. Such letters can be signed by the organizational unit authorized to make

financial commitments against the energy and energy-related maintenance and operating accounts for the agency site that will host the delivery order project.

A template for the standard MOU is provided as Attachment 1. The MOU is discussed further under Step 1.4 in Chapter 4.

1.5.2 Interagency Agreement (IAG) and Costs to Use Super ESPCs

An Interagency Agreement (IAG) between DOE and the ordering agency is required to reimburse DOE for technical assistance FSN provides with using the Super ESPCs. The IAG consists of a standard form, a statement of work describing the services to be provided to the agency by FSN, and a letter verifying that the agency has the funds to fulfill the agreement. The cost depends on the agency's choice of project type and optional services. The IAG is covered in more detail in Chapter 3, which discusses the role of FSN in Super ESPC projects. Attachment 2 is a template for an IAG.

Reimbursement to DOE for FSN's technical assistance and support is the only cost levied by DOE/FEMP for use of the Super ESPCs. Other costs the agency bears are measured in terms of staff resources and required effort. Chapter 3, "Working With FEMP and Budgeting Agency Resources," discusses the importance of realistically assessing expected contributions of agency staff to ESPC project tasks and ways to lighten the workload by taking advantage of FSN's services.

1.6 ACCESS TO MORE INFORMATION AND RESOURCES

1.6.1 The FEMP Home Page: http://www.eren.doe.gov/femp/

FEMP's home page at http://www.eren.doe.gov/femp/ provides access to a wealth of information. A wide array of resources are available to provide information, assistance, and training to agencies interested in developing Super ESPC projects.

From the home page, click on "Financing Alternatives" and then "ESPCs and Super ESPCs," or go directly to http://www.eren.doe.gov/femp/financing/espc.html.

Tools are listed under each region and on the technology-specific Super ESPC pages. For example, downloadable copies of the IDIQ contracts, the DO RFP template, and these *Guidelines* are available in several formats. Up-to-date contact information is also listed.

The FEMP Service Network page is also accessible from the "Financing Alternatives" page or directly at http://www.eren.doe.gov/femp/financing/fempservicenet.html.

The "Resources" page at http://www.eren.doe.gov/femp/resources.html has links to information on analytical software tools, training, ordering FEMP materials, and other subjects.

1.6.2 DOE Regional Offices

The Contracting Officer's Representatives in the DOE Regional Offices are the first point of contact for information on the regional Super ESPCs. A map showing the regions and locations of the offices and contact information are provided in Attachment 3 (and on the FEMP website).

For information about technology-specific Super ESPCs, refer to the FEMP website or Attachment 4. The Contracting Officer's Representatives responsible for the technology-specific Super ESPCs can generally be contacted through the agency site's DOE Regional Office, but may not be based in the agency site's region.

Attachment 4 also lists the ESCOs selected as prime contractors under the technology-specific Super ESPCs. The FEMP website also provides current contact information and ESCO information.

1.6.3 Comments and Questions

The *Guidelines* will be revised as needed to improve the process of awarding and managing Super ESPC delivery orders. Questions about the *Guidelines* should be directed to Angela Carroll at (423) 576-0999 or carrollap@oro.doe.gov. (Area code is 865 effective 11/1/99.)

1.7 HOW TO USE THE *GUIDELINES*

The introductory information in this first chapter plus the flowcharts on the following two pages are intended as a brief orientation to the process of developing a Super ESPC delivery order.

Chapter 2, "Practical Guide to Savings and Payments in Super ESPC Delivery Orders," covers some of the fundamental concepts underlying successful energy projects. The information in Chapter 2 is essential to understanding the financial structure of Super ESPC projects and identifying the energy and cost savings that will essentially finance a project.

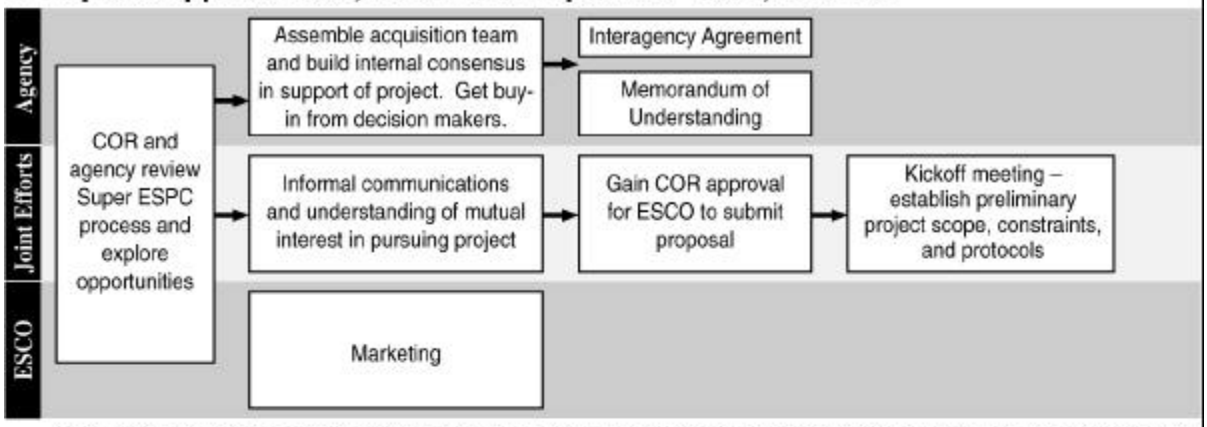
Chapter 3, "Working with FEMP and Budgeting Agency Resources," discusses the support and assistance that FSN provides to agencies and the importance of planning for effective allocation of agency resources during project development and implementation. Chapter 3 also outlines the roles and responsibilities of each of the participants in Super ESPC projects.

Chapter 4 is a more detailed overview of the Super ESPC process. The overview includes descriptions of the tasks the agency will undertake, along with descriptions of FSN basic and optional services. This chapter gives agencies a good vantage point for assessing the effort, planning, and resource commitments necessary to keep development of the delivery order on track and on time.

The *Delivery Order Guidelines* is a reference and general guide to the Super ESPC delivery order process. Readers should also become familiar with the Super ESPC IDIQ contract to achieve a working knowledge of the process. The entire IDIQ contract can be downloaded from the FEMP web site.

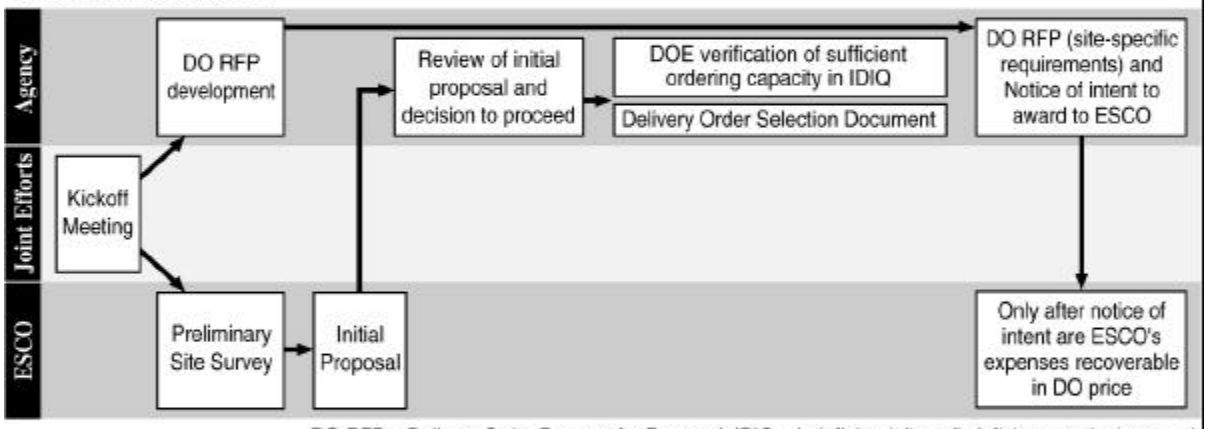
1.8 FLOWCHARTS ILLUSTRATING THE DELIVERY ORDER PROCESS

1. Explore Opportunities, Assemble Acquisition Team, and Plan



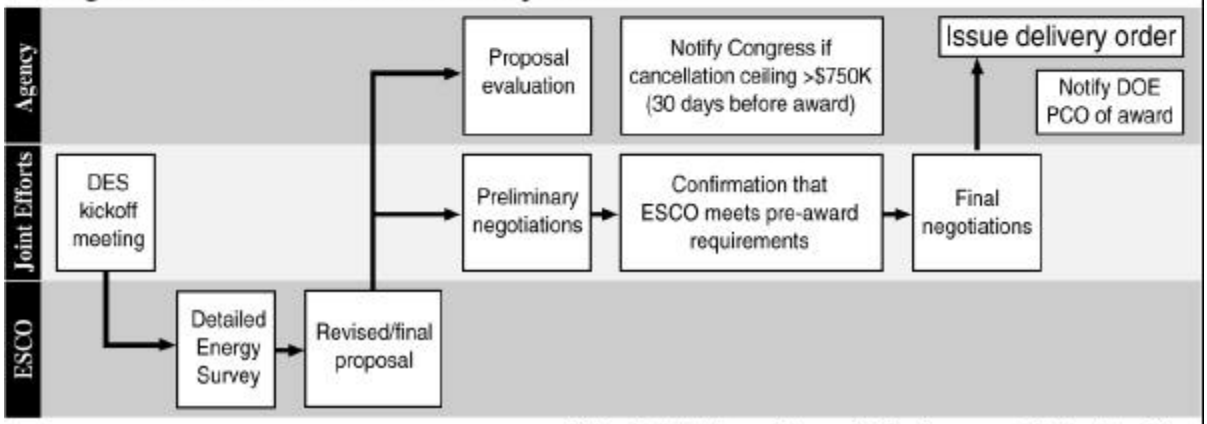
COR = (Procurement) Contracting Officer's Representative; ESPC = Energy Savings Performance Contract; ESCO = Energy Service Company

2. Select an ESCO



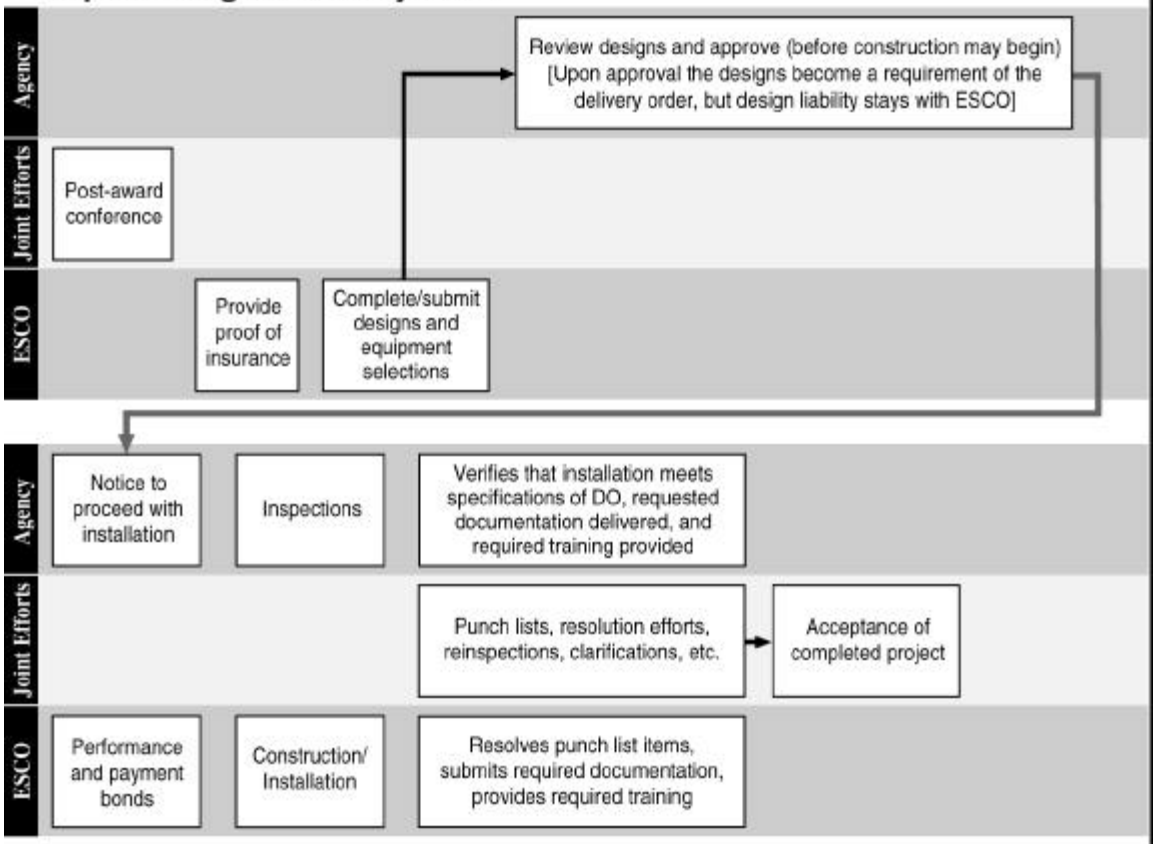
DO RFP = Delivery Order Request for Proposal; IDIQ = Indefinite-delivery/indefinite-quantity (contract)

3. Negotiate and Award Final Delivery Order



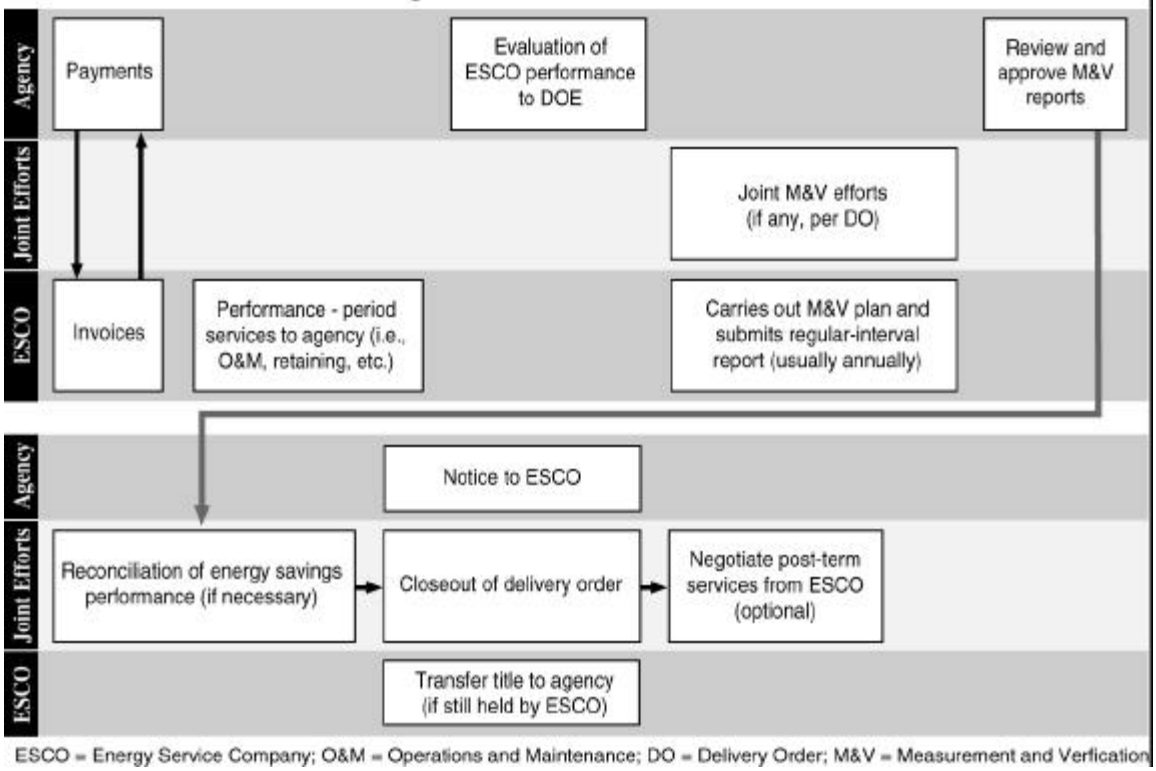
DES = Detailed Energy Survey; PCO = Procurement Contracting Officer

4. Implementing the Delivery Order



DO = Delivery Order; ESCO = Energy Service Company

5. Performance Period through Closeout



ESCO = Energy Service Company; O&M = Operations and Maintenance; DO = Delivery Order; M&V = Measurement and Verfication

2. Practical Guide to Savings and Payments in Super ESPC Delivery Orders

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2. Practical Guide to Savings and Payments in Super ESPC Delivery Orders

2.1 INTRODUCTION

2.1.1 Goal

This document is intended to convey a practical understanding of how to interpret and apply the regulations governing savings and payments under the U.S. Department of Energy's (DOE's) Super Energy Savings Performance Contracting (Super ESPC) programs, particularly "Programmatic Guidance on Energy and Energy-Related Cost Savings and Payments Under Super ESPC," signed April 29, 1999. The goal of the guide is to provide the knowledge, tools, perspective, and benefit of others' experience to enable agencies to structure legal, feasible, and successful Super ESPC projects.

2.1.2 Statutory And Regulatory Basis

This practical guide incorporates the information given in the April 29 DOE guidance mentioned above and included as an appendix to this document. The DOE guidance and this practical guide interpret the statutes and rules that define allowable energy and energy-related operation and maintenance (O&M) savings and payments under DOE's regional and technology-specific Super ESPC programs. The applicable statutes and rules include the National Energy Conservation Policy Act (NECPA 42 USC 8287) as amended by the Energy Policy Act of 1992 (Pub. L. 102-486) and codified into regulation as the DOE Final Rule (10 CFR Part 436).

2.1.3 Scope of the Practical Guide

Shaping a Super ESPC project that delivers optimal technical and financial performance requires full knowledge and careful analysis of the technical and financial options. Understanding what kinds of savings may be accounted for and used to pay the contractor is critical to taking full advantage of the leveraging power of ESPCs. This guide translates into layman's terms the relevant statutes and regulations, discusses the practical implications of the rules, and covers the concepts that are the foundation of the Super ESPC program. Examples are used to illustrate a few of the types of savings that are commonly applied to payments to the contractor.

In response to needs expressed by many agency acquisition team members, this guide discusses accounting and financial administration of Super ESPC projects in Section 2.6, which outlines examples of generic procedures that agencies can adapt to their own financial systems.

This guide focuses on the basic financial structure of ESPC projects: the fundamental concepts in performance contracting, allowable savings, and financial administration. Establishing the cost baseline against which savings will be measured is a critical task in structuring the delivery order, as is defining and specifying a plan for measurement and

verification (M&V) of energy cost savings, whether they be derived from energy savings or from avoided energy-related O&M outlays. While we recognize the central importance of M&V and cost baseline issues, they are beyond the scope of this guide and are addressed here only peripherally. More information about M&V and establishing cost baselines is available at the websites listed below.

2.1.4 Super ESPC Information Available On-Line

Guidance documents and other information regarding the regional and technology-specific Super ESPCs are available on the Federal Energy Management Program's (FEMP's) web site. For information and contacts in your region go to FEMP's Super ESPC page at http://www.eren.doe. gov/femp/financing/ superespc.html. Each region has links from there. For information about technology-specific Super ESPC programs go to http://www.eren.doe.gov/femp/financing/ tecspec.html. The address for FEMP's home page is http://www.eren.doe.gov/femp/femp.html.

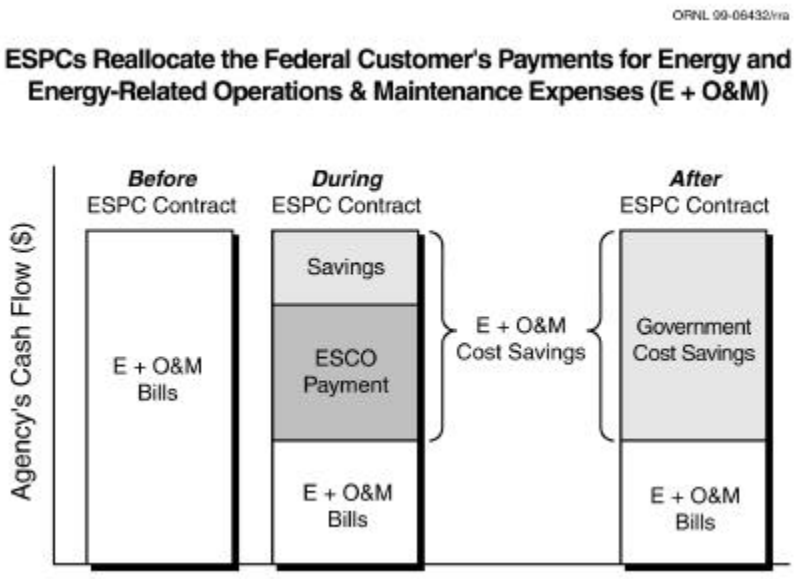
FEMP *M&V Guidelines* and other information on M&V are available at http://www.eren.doe. gov/femp/financing/measguide.html and at http://eande.lbl.gov/CBS/femp/MVdoc.html.

2.2 BACKGROUND

The Super ESPC program is designed to help federal agencies improve energy efficiency in their facilities and reduce their energy costs. Federal agencies are motivated to cut energy use because of the mandates of the Energy Policy Act of 1992 and several executive orders, the latest of which is E.O. 13123. Super ESPCs streamline the process of gaining access to the expertise and private financing offered by energy service companies (ESCOs) under performance contracts.

Under the Super ESPC program, indefinite-delivery, indefinite-quantity (IDIQ) contracts were awarded to a number of ESCOs through a competitive process. With these contracts in place, the lion's share of the government procurement process is already done. Federal customers can place and implement delivery orders against the contracts in a fraction of the time it takes to develop a stand-alone ESPC.

The contracts under the regional and technology-specific Super ESPC programs require the ESCOs to guarantee that the energy-efficiency improvements will result in a specified level of annual cost savings to the federal customer and that these savings will be sufficient to pay the ESCO for its work over the term of the contract. The ESCO and the customer agree on annual firm, fixed-price payments that are less than the cost savings guaranteed for the year. Savings to the customer must exceed payments to the ESCO in every year of the contract's term. Payments are made monthly, and verification that the guaranteed savings are being delivered occurs at least annually.



The figure above portrays the dynamics of a Super ESPC project in terms of the agency's cash flow before, during, and after the term of the delivery order contract. During the term of the delivery order, the agency continues to budget and request appropriations as before, and savings generated by the ESPC project are applied to payments to the ESCO. At the end of the contract term, payments to the ESCO cease and savings to the agency (in practice, often applied to ongoing O&M expenses) continue to accrue.

2.3 FUNDAMENTAL CONCEPTS IN PERFORMANCE CONTRACTING

Understanding the dynamics and mechanics of federal ESPCs helps to provide a context for the specific rules and definitions that apply. Some of the organizing principles of ESPCs and their relation to savings and payments are discussed in general terms in the following paragraphs and then summarized in a list. The rules and regulations are discussed in greater detail in Sections 2.4 and 2.5.

2.3.1 Cost Savings Defined

The definition of cost savings under federal Super ESPC programs is the first fundamental:

> **Cost savings are defined** as a reduction in the cost of energy and related operation and maintenance (O&M) expenses relative to a pre-project base cost — a baseline representing the amount the agency would be paying if the ESPC were not implemented.

2.3.2 The Principal Players and Their Roles

A Super ESPC delivery order project is a partnership between a customer (a federal agency site) and one of the ESCOs preselected under the Super ESPC Program.

The Principal Parties to the Contract

- **The ESCO (contractor)**
  - — performs the work and delivers the energy-efficiency project as defined in the delivery order;
  - — assumes the up-front costs, either financing the project in-house or acquiring financing from a third party, and guarantees savings will exceed payments; and
  - — retires the debt and is compensated for services with monthly payments over the delivery order term.
- **The federal customer (government agency)**
  - — continues receiving annual budget appropriations for energy costs and energy-related O&M costs in amounts corresponding to the pre-project baseline;
  - — from these funds, pays for energy costs and energy-related O&M costs;
  - — from these funds, pays the ESCO over the term of the delivery order (which is possible because savings are guaranteed to exceed payments); and
  - — manages the contract from initial development throughout the contract term.

2.3.3 Capital Improvements Without Capital Appropriations

The Super-ESPC programs allow federal agencies to implement energy-efficiency projects without requiring capital appropriations from the federal budget, providing a means of using private financing to leverage funds routinely appropriated to the agency for energy and energy-related O&M. When a Super ESPC project is implemented, money the agency would have annually spent for wasted energy and O&M of obsolete equipment is instead spent on renewal of energy-consuming systems to improve energy efficiency.

Federal agency customers may enter into a multiyear ESPC if they have their normal appropriations for energy and energy-related O&M. There is no requirement that the agency have appropriated funds available at the outset to pay for the total costs for the entire term of the ESPC. The Super ESPCs allow the federal customer to incur a long-term obligation to pay for the project from guaranteed savings, and the ESCO arranges financing for the up-front costs and retires the debt over the delivery order term. The maximum term of a delivery order under the Super ESPC Program is 25 years.

It is not only possible — it is also *imperative* — to implement Super ESPC projects without resorting to capital appropriations. Regulations prohibit agencies from using capital line-item appropriations from Congress to pay an ESCO for a Super ESPC project. To clarify, this prohibition refers to the "color of money" as defined by Congress. Government agencies use various terms for organizing their own budget categories, and the meanings assigned to "capital," "operating," and other colors of money may vary from one agency to another. However, only the color assigned to an appropriation by Congress is important in this context. Line-item capital appropriations from Congress may not be used to pay for Super ESPC projects. Appropriations from Congress for operating and maintenance expenses may be used for ESCO payments, regardless of the agency's naming conventions, if the money is appropriated for and comes from the agency funds budgeted and allocated for energy and energy-related O&M expenses.

2.3.4 Long-Term Value

ESPCs address a problem that has plagued federal facilities for many years, as they coped with tight budgets. Year-by-year budget appropriations for energy and maintenance of energy-consuming systems rarely provide funding levels adequate for capital renewal of energy-consuming systems, especially renewal with higher-cost, highly energy-efficient equipment that can be justified on a life-cycle basis. Institutional foresight that is limited to just a few budget cycles results in purchases based on lowest first cost, disallowing considerations of value based on longer-term life-cycle costs. Consequently, energy efficiency and true economy have been sacrificed for short-term cash flow. These short-term gains, however, are too often negated by perpetually high energy costs, maintenance costs for equipment that is less than optimal for its application, and repeated procurements for more patchwork solutions. ESPCs allow agencies to invest in long-term value and efficiency.

2.3.5 Using Cost Savings to "Finance" Energy-Efficiency Projects

In planning an ESPC project, figuring cost savings is analogous to raising working capital. Because the project must be paid for out of the cost savings produced by the work performed under the delivery order, the cost savings, term of the delivery order, and prevailing interest rates dictate how much "working capital" can be raised (i.e., how much project investment the savings stream can support). Most ESPC energy-efficiency projects implement several energy-conservation measures (ECMs) with a range of payback periods. For example, bundling lighting retrofits, which may pay for themselves by their cost savings in less than two years, with longer-payback HVAC infrastructure improvements enables the comprehensive "deep-savings" project to still have an acceptable term.

DOE FEMP guidance indicates that life-cycle costs for ESPC projects may be analyzed for the overall project, rather than at the level of individual ECMs. NECPA, Title VIII in Section 801 (a) and the EPAct of 1992 in Section 801 (a) both indicate that the heads of federal agencies "may enter into contracts [meaning delivery orders, within the framework of DOE Super ESPCs] under this title solely for the purpose of achieving energy savings **and benefits ancillary to that purpose**." An obvious benefit "ancillary to that purpose" would be to include in projects ECMs such as CFC-free chillers to preserve the ozone layer, whether or not the chiller ECM can stand on its own in a life-cycle sense when remaining service life of the existing equipment and the other factors are considered.

2.3.6 Leveraging Power of One-Time Savings from Avoided Energy Projects

Leveraging of budgeted energy projects is among the most cost-effective strategies available to agencies developing ESPC projects. Agency acquisition teams planning a comprehensive energy-efficiency retrofit may find that the ESPC project will make unnecessary one or more repair or renewal projects that were previously planned and budgeted out of energy-related O&M budgets. The savings from avoiding these budgeted outlays qualify as one-time energy-related cost savings.

One-time energy-related cost savings can be applied as a payment to the ESCO and can leverage the project investment supported by annually recurring cost savings. This leverage can enable the project to include a more comprehensive set of ECMs and achieve deeper

savings than would be possible without the one-time savings. An alternate choice is for agencies to keep the overall project investment the same and use the one-time payment to lower the financed amount, shorten the term, and thereby reduce interest costs over the term.

2.3.7 Using the Super ESPC to Upgrade Projects Funded With Capital Appropriations

Even though federal agencies are encouraged to purchase the most energy-efficient equipment available for their capital projects, the amount of funding provided in many cases is insufficient to pay for the technologies that will yield the highest efficiency and best life-cycle value. A Super ESPC delivery order can be used to add energy-efficiency improvements to the capital project. The energy-consuming systems to be upgraded are constructed by the ESCO or its subcontractors under the same construction management as for the overall project. As in the case of all Super ESPC delivery orders, payments to the ESCO for improvements to a capital project must be made over time from the energy and related O&M cost savings generated by the improvements implemented under the delivery order. Payments to the contractor for the ESPC delivery order for these improvements may not be made from capital appropriations.

2.3.8 Summary

Fundamental Concepts in Energy Performance Contracting

- **Cost savings** are defined as a reduction in the cost of energy and related O&M expenses relative to a pre-project baseline.
- **A Super ESPC delivery order project is a partnership** between one of the preselected Super ESPC ESCOs and a federal customer.
- **ESPCs use private financing** to leverage the funds in federal agencies' energy and related O&M budgets.
- **Long-term value** can replace lowest first cost as the basis for purchasing decisions under Super ESPCs.
- **Bounds on investment in ECMs:** In an ESPC, cost savings, the term of the delivery order, and prevailing interest rates determine how much investment in ECMs can be made and therefore how comprehensive the project can be.
- **Contract term:** Project costs, magnitude of energy and energy-related cost savings, energy efficiency and payback periods of the energy-conserving equipment installed, and financing costs are factors that must be weighed against each other in planning an ESPC project. The term of the delivery order will be a function of these factors, but cannot exceed 25 years.
- **Energy-conservation measures:** A range of ECMs in comprehensive energy-efficiency projects can balance payback periods to achieve an acceptable contract term.
- **One-time cost savings:** Savings from avoided spending for budgeted energy-related projects made unnecessary by the ESPC project can apply extremely cost-effective leverage of agency funds.
- **Upgrading capital improvement projects with ESPCs:** A Super ESPC delivery order may be used to add energy-efficiency improvements to projects that are funded by capital appropriations, but payments to the contractor for upgrades or add-ons must come from savings to energy and related O&M expenses.

2.4 ALLOWABLE SAVINGS AND SOURCES OF PAYMENTS

This section is more closely focused on savings and payments in performance contracting. The discussion begins with definitions of the types of savings that can be accounted for and used to support payments to the contractor. Some conditions that apply to payments to the contractor are discussed next. For these savings to be used to support payments to the contractor, they must also be "real" savings, as defined below. Baseline costs, against which savings are measured, are briefly discussed. Additional cautionary directives regarding documentation of savings also apply and are reviewed. The definition of allowable savings is expanded in Section 2.5 by using examples of situations that illustrate particular types of cost savings.

2.4.1 Allowable Cost Savings

The statutory and regulatory basis for defining how agencies may pay for energy projects performed under Super ESPC delivery orders is found in 42 USC 8287a and 10 CFR Part 436.36. The money to pay the contractor for the work must be paid from funds appropriated for energy expenses and related O&M expenses, and must all be from cost savings that result from the ESPC project itself. Two main categories of savings are referred to in ESPC delivery orders: (1) energy cost savings and (2) energy-*related* O&M cost savings. There is no basis in the ESPC statute or regulations for requiring that energy savings constitute 50% or any other arbitrary proportion of total savings.

2.4.2 Energy vs. Energy-Related Cost Savings

Energy Cost Savings

Energy cost savings are reductions in costs for energy as a commodity, which may result directly from using less energy or from using renewable energy sources. Energy costs can also be reduced by paying lower rates for the energy. Lowering peak demand or correcting power factor can result in lower rates being charged by the energy supplier. Energy cost savings are generally "recurring" savings—savings that occur year after year.

Energy-Related Cost Savings

Energy-related cost savings are reductions in expenses *related* to energy-consuming equipment such as HVAC systems, lighting, and water heaters. They may be recurring or one-time savings. Recurring energy-related cost savings generally result from reduced O&M expenses. One-time energy-related cost savings can result from avoided expenditures of O&M funds for projects that were budgeted and planned but, because of the ESPC project, will not be necessary. Including one-time energy-related cost savings in the financial structure of a project before the money for the planned expenditure has been appropriated entails some risk to the agency. If the expected appropriation is not made, the agency is still liable for making the payments figured based on savings from avoiding the planned expenditure. (See Section 2.4.6.)

2.4.3 Real Savings

Only "real savings" may be applied to contractor payments; that is, the savings must show as reduced expenses in the agency's accounts for energy or energy-related O&M. Payments must come from money that the government was either already spending or planning to spend, which can now be redirected because of the energy work that is done under the ESPC. The corollary to this requirement is that contractor payments must come out of the agency's funds budgeted and allocated for energy (e.g., for utility payments) or energy-related O&M. Only real savings, by definition, will make money available for contractor payments.

When Real Is Not Ideal: Maintenance and Operations Spending

Tight budgets in many cases force agencies to stretch energy dollars by operating their facilities using substandard procedures or equipment. Using the least expensive (but less effective) air filters for a ventilation system, for example, might be necessary to keep expenses within budget. A nearly universal strategy for cutting expenses is deferring maintenance. However, in cases such as these, the energy-related savings must be figured on the basis of actual budgeting and spending patterns rather than on the level of spending that would have been necessary for optimal O&M of the system.

When Real Is Not Ideal: Avoided Spending for Budgeted Projects

A similar standard limits the amount of a one-time savings claimed for energy projects that were planned but became unnecessary because of an ESPC project. The planned project may have been specified at the lowest possible first cost, with a corresponding budget appropriation. This amount is the maximum that may be claimed as one-time energy-related savings, even if the smarter investment (and the obvious choice, given sufficient resources) would have been to pay higher first costs for more energy-efficient equipment that would cost less over the long term of its life cycle.

2.4.4 Payments to the Contractor

The laws and regulations governing payments to the contractor have been mentioned in the foregoing discussion. Statutes and guidance specify permissible sources of the money and define the relationship of guaranteed savings to payments. The ESPC delivery order must also specify agreed-upon methods of determining cost savings and verifying that savings will exceed the guarantee each year. The conditions that payments must meet to comply with ESPC regulations are summarized below.

Payments to ESPC contractors must satisfy these criteria:

- **Cost savings must exceed payments.** Guaranteed cost savings to the federal customer must exceed payments to the contractor in every year of the delivery order term.
- **Payments come from funds budgeted and allocated for energy and related O&M expenses only.** Payments to contractors may be paid only from funds appropriated to the agency for energy expenses and related O&M expenses and deposited in agency accounts designated for those purposes.
- **Documentation.** The basis for determining energy and energy-related O&M cost savings is documented and agreed upon by the federal customer and the contractor.

2.4.5 The Cost Baseline

Savings are measured against baseline costs—the expenses that the agency would have incurred had the ESPC delivery order not been implemented. Baseline costs are established as part of the measurement and verification (M&V) methodology that is agreed upon by the contractor and the customer and is documented in the delivery order.

Baseline costs are not only the reference point for figuring savings; they also determine the amount of funding that will be annually requested by the agency and appropriated by Congress for energy and related O&M expenses throughout the term of the contract. Because the contractor guarantees that delivery order cost savings will exceed contractor payments, the appropriated funds will cover all energy and related O&M expenses plus payments to the contractor.

By statute, the baseline amount is equal to the sum of (1) the energy use baseline used under the ESPC delivery order (adjusted if appropriate), multiplied by the unit energy cost, plus (2) pre-project related O&M costs, adjusted for increases in labor and material price indices.

Annual Appropriations Must Cover Routine Energy and Related O&M Costs Plus ESPC

During the term of the contract, the yearly appropriations from Congress for energy and related costs will be based on pre-project baseline costs. These funds must cover

- energy costs,
- energy-related O&M costs, and
- payments to the contractor for the ESPC delivery order project.

2.4.6 DOE FEMP Programmatic Guidance on Savings and Payments

Early experience with ESPCs demonstrated the wisdom of several practices that have since become required standard procedure. For example, differences of opinion concerning baseline costs and calculation of savings are now precluded by requirements that the ESCO and the agency agree on and document in the delivery order the methodology to be used to determine baseline costs and savings. DOE's summary guidance on savings and payments in ESPCs directly addresses this issue and emphasizes the following directives.

DOE FEMP Programmatic Guidance on Savings and Payments in Super ESPCs

Establishing the Basis for Determining Savings

The basis for determining cost savings (the M&V method) must be agreed on and documented in the delivery order.

Documentation of Energy-Related O&M Savings

DOE FEMP guidance stresses the directive that agencies should "exercise due diligence" to document for the project all of the energy-related O&M cost savings in the delivery order, which may include (1) for recurring energy-related O&M cost savings, the estimated avoided operation, maintenance, renewal, repair, or other costs; and (2) for one-time energy-related O&M cost savings, the estimated cost of the avoided government projects.

Risk of Including Funds Not Yet Appropriated

The summary guidance also makes clear that agencies take a risk when including one-time savings from avoided spending for government energy projects for which funds are budgeted for request, but not yet appropriated. When an ESPC delivery order is awarded that includes such savings and associated contractor payments, the agency is obligating itself to making the payments in full, even if the requested appropriation does not materialize in full.

Payments for ESPCs Used in Conjunction with Capital-Improvement Projects

Payments to the contractor for energy-efficiency improvements done under an ESPC delivery order but in conjunction with a capital-improvement project must not come from capital appropriations. These payments must be made from funds budgeted and allocated for energy and related O&M and must be less than the savings delivered as a result of the energy-efficiency improvements.

2.4.7 Checklist of Guiding Principles and Directives on Savings and Payments

Allowable Savings and Payments

- **Savings that may be used to support payments** to the contractor may be energy cost savings or energy-*related* cost savings (from reductions in expenses related to energy-consuming systems — i.e., O&M costs).
- **Only real savings** may be applied to contractor payments—savings that show as reduced costs for energy or energy-related O&M expenses.
- **O&M savings may be claimed only for the amount that was actually budgeted or being spent**, even if that amount was insufficient for properly maintaining or running a given system. Higher amounts representing the ideal for optimal performance or maintenance may not be claimed.
- **Only the budgeted amount may be claimed as one-time savings** for avoided expenditures for planned energy-related O&M projects.
- **Payments to the contractor are restricted by these standards:**
  - — Savings must exceed payments in every year of the contract.
  - — Funds must come from appropriations for energy costs or related O&M costs.
  - — The basis for determining cost savings of all types is agreed upon and documented by the customer and the contractor.
- **Savings are measured against baseline costs**—the expenses that the agency would have incurred had the ESPC delivery order not been implemented.
- **Yearly appropriations from Congress for energy and energy-related O&M costs** during the term of the ESPC delivery order will be based on pre-project baseline costs. During the term of the contract, these regular appropriations must cover
  - — energy costs,
  - — energy-related O&M costs, and
  - — payments to the contractor for the ESPC project.
- **The basis for determining all savings must be documented** and agreed upon by the contractor and the customer in the delivery order.
- **Agencies are advised to carefully document cost savings** of every kind.
- **Including requested funds not yet appropriated:** If one-time savings for an avoided energy project are included in a delivery order award before the funds for that project are appropriated, the agency is obligated to make the full payments that are based on the expectation of those savings, even if the requested appropriation does not materialize in full.
- **Using ESPCs to upgrade capital projects:** A Super ESPC delivery order may be used to add energy-efficiency improvements to projects that are funded by capital appropriations. Payments for such delivery orders must be made from energy and related O&M cost savings resulting from the energy-efficiency improvements—not from line-item capital appropriations from Congress. DOE FEMP will not accept Super ESPC delivery orders that include payments from line-item capital appropriations.

2.5 ESPC COST SAVINGS — SOURCES AND EXAMPLES

Some sources of cost savings are listed in this section, along with narrative to reinforce an understanding of how these savings may be incorporated into the structure of delivery orders and used to support payments to contractors. Briefly described scenarios for each type of cost savings illustrate their application in ESPC delivery orders. Allowable sources of cost savings are not limited to those illustrated in these examples.

2.5.1 Sources of Energy Cost Savings

Energy cost savings are at the core of all Super ESPC delivery order projects. All delivery orders must include agreements on determining energy cost savings and corresponding contractor payments. Each year of the contract term the agency will continue to budget and request funds for energy costs (electricity, natural gas, propane, oil, etc.). The amount requested by the agency and appropriated by Congress to the agency for energy expenses is figured using the pre-project energy cost baseline. This amount is sufficient to pay energy costs and the contractor, because the energy cost savings that will be derived from the delivery order project exceed the agreed-upon payments to the contractor.

Energy Cost Savings

- **Energy savings** are generally ongoing after the ECMs are implemented — i.e., they are *recurring* in every year of the delivery order term.
- **Sources** of energy savings include, but are not limited to
  - — less energy use,
  - — improved pattern of energy use,
  - — power factor correction,
  - — fuel substitution or dual fuel, and
  - — change in utility rate structure in conjunction with ECMs.

2.5.2 Sources of Energy-Related Cost Savings

Many ESPC delivery order projects reduce the agency's costs of maintaining and operating energy-consuming systems. Energy-related cost savings in the form of recurring O&M cost savings may in some cases be as significant as energy cost savings.

In developing the delivery order, the agency and contractor look closely at the ECMs to be implemented and determine whether the project will result in any real savings in energy-related O&M baseline budgets. If so, the avoided costs are estimated to the satisfaction of the agency and documented for the project file. As in the case of the energy budget, energy-related O&M funds requested by the agency and appropriated by Congress each year are figured using pre-project cost baseline metrics. For example, in cases where the contractor assumes responsibilities for maintenance, the agency is able to pay the energy-related O&M

costs and the contractor out of the appropriated funds because the contractor has agreed to fixed-price payments that are less than the recurring amount that would otherwise have been spent on maintenance.

One-time energy-related cost savings are realized when the government has budgeted funds to renovate, renew, or repair energy-consuming systems or modify them to meet environmental regulations, but the proposed delivery order makes those projects unnecessary. Avoided renewal or repair expenses for large equipment (such as a boiler) would generally be treated as one-time savings. (Avoided costs for ongoing repair, maintenance, or replacement-on-failure of many small separate units, however, are generally *recurring* cost savings.)

Energy-*Related* Cost Savings

- **Energy-related savings** may be ongoing or may be one-time savings.
- **Sources** of energy-related O&M savings include
  - — avoided current or planned spending,
  - — transfer of responsibility for O&M to the ESCO, and
  - — avoided renovation, renewal, or repair costs.

2.5.3 Examples of Cost Savings

Following are some examples of the kinds of cost savings that can be included in a Super ESPC delivery order. A general picture of the savings that an ESPC project will deliver can be made by comparing the situation and conditions at the agency's facility before the energy-efficiency project with the situation that will exist during the performance period, after the project has been implemented and accepted. The difference between the before and after pictures gives a qualitative approximation of savings. The examples below may help in a similar way to clarify what kinds of situations yield each type of savings.

Energy Cost Savings

Less Energy Use. An old, inefficient boiler originally designed for coal but fitted with a natural gas burner 20 years ago is replaced with a bank of staged, modular, natural-gas–fired condensing boilers with much greater efficiency. Lower bills for natural gas represent an annually recurring energy cost savings.

Improved Pattern of Energy Use. A chiller plant is fitted with a chilled water storage facility and modified controls so that peak-period chiller operation is displaced with cool storage and night chiller operation to recharge storage. The avoided electricity peak demand charges are an annually recurring energy cost savings.

Power Factor Correction. Capacitor banks are added to balance loads on a facility's power system. The avoided power factor penalty charges are annually recurring energy cost savings.

Substitution of One Form of Energy for Another. A natural-gas line is run to the oil-fired boilers in a central steam plant, and dual fuel burners are installed so that the lowest-cost fuel can always be used. Oil backup allows gas to be purchased at its commodity cost without contract demand charges. The avoided fuel costs are annually recurring energy cost savings.

Recurring Energy-Related Cost Savings

Operation Costs. The contractor upgrades space- and water-heating equipment in a complex of buildings so that steam lines and a central steam plant are no longer needed, and the retiring boiler operator does not need to be replaced. The avoided costs of employing a boiler operator (salary, benefits, worker's compensation, overhead) are annually recurring energy-related cost savings.

Maintenance Costs. The contractor upgrades HVAC systems in a complex of buildings and assumes maintenance and repair responsibility, replacing the current HVAC service subcontractor. The avoided subcontract cost is an annually recurring energy-related cost savings.

Renewal Costs. The contractor replaces an aging mixed-vintage population of small packaged HVAC units with new equipment. The old units were approaching, at, or exceeding their expected service lives, and the agency was planning to replace them with similar units as they failed as part of ongoing HVAC maintenance efforts. The planned expenditures for "like-to-like" replacements are annually recurring energy-related cost savings.

Repair Costs. The contractor replaces a population of small packaged unitary HVAC equipment having significant remaining service life with substantially more efficient equipment, and assumes maintenance and repair responsibility. This allows the overburdened government maintenance staff to focus on non-HVAC maintenance needs or other buildings. The planned expenditures for repair parts and materials are annually recurring energy-related cost savings that can support contractor payments, but there are no personnel cost savings because the agency site's staffing level remains the same.

One-Time Energy-Related Cost Savings

Avoided Renovation. The contractor upgrades space- and water-heating equipment in a complex of buildings such that steam lines in the area are no longer needed. The government had planned to renovate one of the buildings using and budgeted appropriations in an O&M account. As part of the planned renovation project, a new steam line was to be run around one wing of the building so that a steam line under that wing could be abandoned. This part of the renovation was intended to make the indoor environment more comfortable for building occupants and to eliminate the excessive cooling costs caused by the steam line. The expense of building a new steam line is avoided because the upgraded heating equipment

makes it unnecessary, and this avoided expense qualifies as a one-time energy-related cost savings.

Renewal. As part of a comprehensive energy retrofit project, the contractor replaces an aging chiller that uses CFC refrigerant. The agency's planned "like-to-like" replacement with a non-CFC chiller using budgeted funds in an O&M account is no longer necessary. As an added benefit, the new chiller can be smaller because of lighting upgrades and other energy-conservation measures. The planned expenditure for the "like-to-like" chiller replacement is a one-time energy-related cost savings.

Avoided Repair. The contractor upgrades space- and water-heating equipment in a complex of buildings such that steam lines and the central steam plant are no longer needed. The agency was planning to tear down and rebuild the boilers in the central steam plant using planned and budgeted appropriations in an O&M account. The avoided boiler refurbishment expenditures are a one-time energy-related cost savings that can support a contractor payment.

2.6 FINANCIAL ADMINISTRATION AND ACCOUNTING FOR SUPER ESPC PROJECTS

This discussion of financial administration and accounting for Super ESPC projects is in response to many requests from agency acquisition teams and others for such information. Among those who have expressed interest are champions of performance contracting who need facts to gain decision makers' support for a project, team members who anticipate questions from their finance and accounting departments, and contracts and finance officers who must ensure that their agencies remain compliant and fiscally responsible in whatever obligations they incur.

This information, based on consultations with agency accounting, finance, and contracts professionals, is intended as advisory and educational material — not as dictum or prescription. Every agency will have its own requirements to consider, but one of the main points here is that the regulations regarding Super ESPC projects require no new overlay of procedures on an agency's internal accounting routines.

The principal goals of this section are

- to clarify questions about regulatory requirements imposed on agencies' internal accounting and financial administration of Super ESPC projects;
- to answer frequently asked questions about these matters;
- to give some examples of generic standard accounting procedures that could be adapted to agencies' own systems of accounting for Super ESPC projects; and
- to give interested acquisition team members having no professional financial background an overview of the issues that may be of concern to their finance and accounting departments.

2.6.1 No Extraordinary Measures Required

Financial administration and accounting procedures are no more complex for Super ESPC projects than for any other contract and may be considerably simpler than for many transactions. Neither the Super ESPC program and contract nor related statutes or regulations impose any requirements for special internal accounting procedures on agencies implementing projects. Agencies' accounting professionals will find that a Super ESPC project requires no extraordinary measures and no procedures beyond standard accounting practice. Agencies will, however, want to ensure for their own purposes that payments to the ESCO and cost savings in the applicable accounts will be trackable and auditable.

In compliance with DOE FEMP guidance — and consistent with the intent of Super ESPC legislation to finance energy projects without resorting to capital line-item appropriations — all of the savings from and payments for Super ESPC delivery orders will be reflected in the agency's accounts for energy and energy-related O&M. Annual appropriations for energy and energy-related O&M will continue to be distributed to these accounts, and payments to

the ESCO taken out of them. Paying for energy costs and related O&M expenses in addition to paying the ESCO from these accounts is possible because the ESCO has guaranteed that the cost savings resulting from the work done under the delivery order will exceed the agency's payments for the project.

2.6.2 Proving Savings — NOT an Accounting Function

There is no requirement that the agency's internal accounting prove that the guaranteed savings are delivered (although savings will be established de facto when all the bills are paid out of the designated accounts). The legal and contractual responsibility to show that the guarantee has been met is the ESCO's, through proving the performance of the implemented project. M&V procedures, not accounting methods, are the appropriate tools for this task. (M&V responsibilities are negotiated between the ESCO and the agency and are specified in the delivery order. In some cases the agency or a third party may take some responsibility for M&V, although the government prefers that these tasks and costs be included in the ESCO's scope of work under the delivery order. The agency is always responsible for accepting or contesting the conclusions of the annual M&V report.)

Accounting for a Super ESPC project requires the standard procedures of tracking income and expenditures, but not directly tracing guaranteed savings to specific accounts. Moreover, the ESCO's guarantee of cost savings is a wholesale guarantee that applies to the entire array of implemented ECMs and by implication to the overall bottom line on the affected energy and energy-related O&M accounts — but not to any one account or ECM in particular.

2.6.3 Budgeting and Accounting for Super ESPC Projects

Every agency has its own internal procedures and requirements, so the following discussion is intended as an overview of budgeting and accounting issues for a generalized case. Rather than presuming to instruct accounting and finance professionals in their own areas of expertise, this information is intended to (1) review typical procedures for the uninitiated and (2) highlight exceptions to general rules and address particular financial issues related to Super ESPCs.

Building the Budget

Budgeting forward for the performance period is based on known quantities rather than guesswork. Payments to the ESCO are fixed for the term of the contract at the outset and are not subject to change (unless the ESCO must compensate for shortfalls in meeting the savings guarantee or changes in the baseline are needed). Adjustments to allocations in the affected accounts may be necessary if the Super ESPC project results in decreases or increases in expenses in a given category. The delivery order, which details the types and amounts of cost savings that are projected, guides the allocation of funds to energy and energy-related O&M accounts during the budget-building process.

When entering into an ESPC delivery order, the agency must certify that it has sufficient funds to make all the first fiscal year (FY) payments. Agencies do not need to certify that funds are available for subsequent years. The annual payment to the contractor, shown in the delivery order award, is divided by 12 to get the monthly payment amount. Generally the

amount of the payment to the contractor changes annually, as shown on the delivery order payment schedule. If an automatic payment schedule is set up, an adjustment to the payment amount will need to be made every 12 months. There are three components to each monthly payment: principle repayment, interest expense, and service phase cost.

Invoices and Payments

The agency begins to make payments after the first 30-day performance period for the ECMs has occurred and the contracting officer has formally accepted the installed project. The ESCO can then send monthly invoices to the agency, starting with the first day of the month after acceptance. At this point, the agency will have completed the procedures to prepare for the initiation of invoicing and payments. Typically these procedures will

- establish the identity of the contract in the system;
- specify terms of payment and any special requirements for invoicing;
- designate accounts from which payments will be made; and
- authorize payment of the ESCO's invoices for the delivery order (or specify authorization procedures).

Payments can be made in the same way an agency normally pays its bills. Typically,

- the invoice is received;
- the invoice is approved for payment;
- the invoice is sent to the accounts payable department; and
- accounts payable transfers payment to the ESCO, using funds from the account or accounts designated for payment on this contract.

Prompt payment procedures apply.

Adjustments for Savings Shortfalls. If the actual cost savings in any year of the performance period is less than the annual cost savings guaranteed in the delivery order, the ESCO must reimburse the agency for the shortfall. Within 30 days after agreement is reached on the annual energy audit results, the ESCO begins reimbursing the agency by accepting payments over the next year that are adjusted downward for the shortfall. The adjustment reduces payments by the amount of the shortfall, as determined by the annual energy audit for the previous year, and for the anticipated shortfall for the next year. The reduction for the next year's anticipated shortfall continues until the ESCO has submitted, and the agency CO has accepted, evidence that the technical problem creating the shortfall has been fixed.

Invoice Approval for M&O Contractors. Some federal sites, including DOE national laboratories, NASA space centers, and others, are administered by management and operating (M&O) contractors. In these cases, the agency signs the Super ESPC delivery order and in most cases approves invoices, but may delegate responsibility for paying the invoices to the M&O contractor. This is appropriate where the energy and related O&M funds in question are applied to the M&O contract on an ongoing basis. Since the delivery order results in savings to M&O accounts, the M&O makes the payments to the ESCO. Nevertheless, the Super ESPC delivery order is an agreement between the ESCO and the agency, as opposed to being between the ESCO and the M&O. Therefore, the ESCO will

send invoices to the agency rather than the M&O (unless otherwise instructed), and the agency will approve them for payment (or delegate the responsibility to the site M&O).

One Rule Fits All

Although each facility's accounting system is unique, and projects come in various shapes and sizes, one dominant rule applies to them all and makes the accounting decisions simple:

> **Payments to the contractor come from the energy and energy-related O&M accounts that accrue savings as the result of the work done under the Super ESPC delivery order.**

Most projects are based on savings of more than one type, in more than one account. For example, a comprehensive energy retrofit may save energy costs in electricity and natural gas accounts, and also save maintenance costs (recurring energy-related O&M). One-time energy-related O&M cost savings may be a factor as well. Payments to the ESCO should come partially from each of the accounts to which savings accrue.

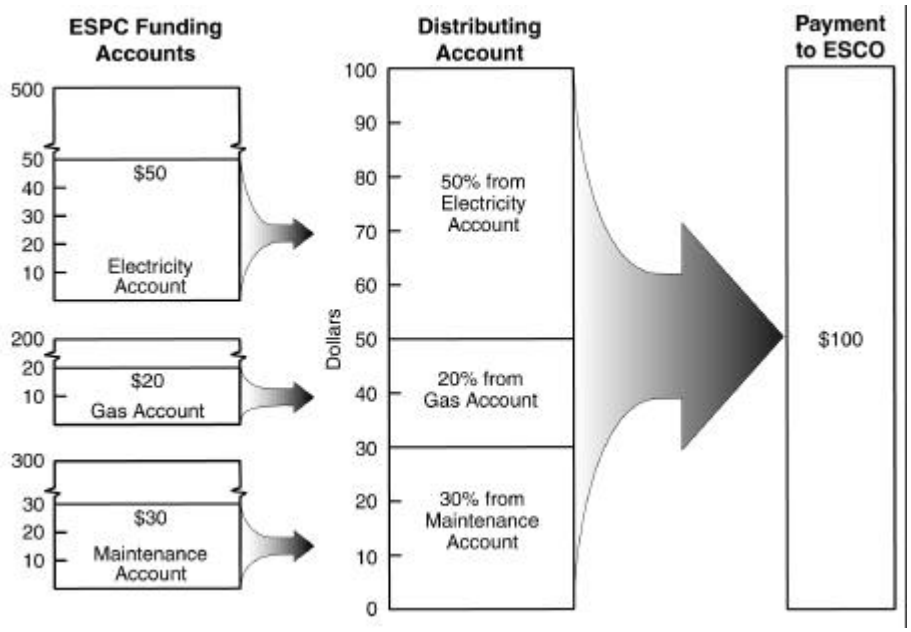
Using a Distributing Account to Streamline ESCO Payments

A "distributing account" (called a "cost center" in some systems) is a standard device to simplify payments that will draw funds from several accounts. The payments to the ESCO can be drawn from the distributing account, and the cost of the payment "distributed" to the designated energy and related O&M accounts — that is, funds are transferred from the designated accounts into the distributing account. The cost can be distributed on the basis of percentage shares or by another appropriate method. Many computerized accounting systems can handle and track these transactions automatically. The function of a distributing account is portrayed schematically in the figure on the following page.

Overhead Distribution

In agencies where utility and maintenance costs are recovered through overhead charges, Super ESPC projects in themselves present no reason for altering this arrangement. Utility and other infrastructure expenses continue to be distributed to overhead in the customary way (usually based on square footage of assigned building space). Many Super ESPC projects are treated as infrastructure improvements, leaving the status quo intact. Overhead charges are not affected, and the ESPC project is virtually invisible to the agency's organizations in their cost reports.

Trickle-down financial effects from energy projects implemented through Super ESPC delivery orders are few. Adjustments may be necessary for large users of utilities or special-purpose facilities that are charged based on usage or factors other than occupied space, if the energy project directly and significantly affects their costs — although costs are more likely to fall than to rise. Where customers are charged according to metered usage, there is ordinarily no reason to change costing mechanisms.



A distributing account is an accounting technique for simplifying payments that draw funds from several different sources.

Raising Rates to Encourage Improvements in Energy Efficiency

The role of the agency's utility and facility managers in on-site demand-side management deserves special mention. In larger facilities, "public works centers" often provide services that smaller organizations and other consumers receive from the local utility company. These centers essentially buy energy in bulk and build and maintain facilities (poles and wires, pipelines, etc.) to distribute it to on-site customers according to their needs. Public works centers support themselves by adding a surcharge to the serving utility's energy rates, and may be motivated, like the serving utility, to keep energy throughput up so that increases in the surcharge rate can be avoided.

Facility managers can take advantage of several opportunities to get the best value possible from the site's Super-ESPC program and to encourage ongoing energy conservation at their facilities. When developing the delivery order, it is appropriate to value Super ESPC energy savings at the rate that tenant programs or activities are actually paying (utility rate plus the surcharge). This will generate more "working capital" to develop a project with greater long-term value, with a more comprehensive set of energy-cost-saving measures, or with a shorter term than might otherwise be possible. (A more conservative approach is to value the savings at the straight utility rate.)

When an ESPC delivery order project is built and the performance period begins, public works can lower budgeted energy throughput by an amount equivalent to the savings guaranteed by the ESCO, immediately triggering an increase in the surcharge rate to keep public works revenues neutral. When faced with this rate hike, tenants who may have

hesitated to implement energy projects before are motivated to get on board with the next delivery order to lower their energy costs. (Small projects will have only a minor impact on surcharge increases.)

Rebates

Many energy suppliers offer rebates or incentives for installing energy-efficient equipment. The ESCO is charged with investigating whether rebates or incentives are available for the project. Rebates can be handled in several different ways to benefit the agency and the project.

If a one-time rebate will be made after installation and inspection, the estimated rebate amount can be deducted from the project cost (shown as a deduction on the H Schedules) prior to financing the project. An alternate method is to show the rebate payment as an additional principal payment in year 1. This does not violate the "payments can't exceed savings" rule because this is not a payment from agency appropriations. The rebate payment is assigned directly to the ESCO by the agency. Any true-up of the actual amount received can be done as a credit or debit on one of the first invoices.

If the rebate will be paid out over a number of years, the estimated rebate amount may either be shown as a net present value of the entire rebate and deducted prior to financing (as explained above), or it can be shown as an extra principal payment in each year the rebate is received. Again, any necessary true-up would be handled on one of the first invoices. Of course, the agency may also elect to retain the rebate and receive it directly from the utility. This can often be handled as a credit to the utility bill. However, checks received directly from the utility are usually difficult to keep at the site level and are often subject to requirements to return such funds to the U.S. Treasury.

Costs of Using Super ESPC

The agency will have expenses connected to the Super ESPC project in addition to ESCO payments. The agency must reimburse DOE for the costs of using Super ESPC and for the technical assistance and project facilitation provided by the FEMP Service Network (FSN), as specified in the interagency agreement (IAG) signed at the project's inception. The costs for the standard FSN facilitator support services have typically been $30,000 for an ESCO-identified project and $50,000 for an agency-identified project. A charge of $10,000 for using a Super ESPC usually applies to agencies who have the in-house expertise to develop a delivery order and implement a project without requiring project facilitation or technical assistance. Optional services are also available at additional cost.

This cost can be paid at the beginning of the project or over 5 years. When the agency chooses to pay the fee over time, that payment is not built into the delivery order payment stream, but is an entirely separate payment to DOE that was agreed to in an IAG. Reimbursement to DOE for FSN services is not required to be paid from the savings produced by the project. Some agencies are finding, however, that the project's savings can cover this cost.

Audits and Project Development. Costs for audits and project development may be paid to the ESCO at the time of delivery order award. Since the services have already been received, the agency may choose to pay for these expenses directly rather than including them in the long-term financing of the project, thereby reducing the interest expense paid out over the life of the project. These costs are typically paid for outside of the delivery order, on a purchase order or impact card.

Other Costs to the Agency. The agency is responsible for contract administration throughout the term of the Super ESPC delivery order. This and other costs of developing, procuring, administering, and managing the Super ESPC project, including acquisition team effort, are covered according to the agency's own policies. Chapter 3 of the *Guidelines* discusses the importance of realistically assessing the extent to which agency resources will be taxed in developing and administering a Super ESPC project. The chapter also discusses FSN estimates of the agency effort required and strategies for maximizing the value of FSN's assistance and the acquisition team's efforts.

Requirement to Return Net Savings to the U.S. Treasury

Regulations include a provision that a proportion of the net savings resulting from Super ESPC delivery order projects be returned to the U.S. Treasury — 50% from civilian agencies and 33% from Department of Defense organizations. This rule has not been implemented or enforced, however, because in practice retained or net savings from ESPC projects are generally small to negligible in comparison to the energy and related O&M accounts they affect— comparable in their magnitude to routine energy-related O&M cost fluctuations caused by weather, unplanned equipment failures, or other common occurrences. Agencies commonly choose to put all of their guaranteed project cost savings into payments to the ESCO to minimize the contract term, thereby reducing interest costs. Most agencies that do have sufficient savings after payments to the ESCO to warrant "returning" a share to the Treasury reduce their future budget requests rather than actually sending a check to the Treasury.

2.6.4 Auditable Systems for Tracking Super ESPC Savings and Payments — Examples of Accounting for Typical Projects

To show one method of tracking the savings and payments associated with a Super ESPC project, we use five examples of typical Super ESPC projects, beginning with the simplest and proceeding to the more complex. The examples represent the range of allowable savings types that projects can include, illustrating the accounts (described in generic terms) that will show savings and be tapped for payments in each case. The following hypothetical projects are used as examples:

- Project 1 — Energy-efficient lighting retrofit
- Project 2 — Replacement of a coal-fired boiler with modular natural-gas–fired systems
- Project 3 — Comprehensive energy-efficiency retrofit
- Project 4 — Comprehensive GHP-centered retrofit, with ESCO assuming maintenance tasks
- Project 5 — Upgrade of water- and space-heating equipment

The information that agencies would typically track in accounting for their projects is shown in two tables in each example. The first table shows funding sources — the accounts where savings from the project will accrue, which might first be designated for the purpose of documenting for a contracting or finance officer how the Super ESPC project will be paid for. These "funding source accounts" are so designated to indicate that they reflect the source of ESCO payments — appropriations for energy and related O&M expenses, which will continue to be allocated at the pre-project baseline level (the amount the agency would routinely budget and allocate for energy costs and energy-related O&M if the delivery order were not implemented).

The allocations to the "funding source accounts" may have been adjusted in the budget-building process before the performance period began, using the delivery order's projection of guaranteed cost savings to guide the attribution of cost savings to particular accounts.

The second table in each case shows expenditures from the funding source accounts. This table tracks payments to the energy supplier (utility company) and payments to the ESCO from utility savings and from accounts for energy-related O&M expenses where applicable.

Abbreviations and Assumptions Used in the Examples

The examples on the following pages are simplified sketches that are intended only to communicate the basics of auditable accounting for Super ESPC projects rather than to represent realistic economics of delivery orders. The numbers in the tables can be used to compare tables, but may not be realistic in terms of financial feasibility, and very few contract terms will be only 5 years long.

For the sake of minimizing verbiage, the following conventions will be used in the examples.

- "Energy cost savings" or "energy savings" are assumed to be *recurring* savings (ongoing throughout the contract term).
- "O&M savings" are assumed to be *energy-related* O&M cost savings.

Project 1. Energy-Efficiency Lighting Retrofit

Savings: • Energy Cost Savings Only — Electricity

A straightforward lighting retrofit, where new energy-efficient lighting equipment reduces electricity use, is perhaps the simplest type of energy project. Recurring energy cost savings only, which will show in an account for paying for electricity, are used to pay the contractor.

Budget for Super ESPC Project 1 ($K)

Funding Source	Acct. No.	Term of delivery order				
		FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	$100	$100	$100	$100	$100
Total funding sources		**$100**	**$100**	**$100**	**$100**	**$100**

Payments from Project 1 accounts ($K)

Payments	Acct. No.	Payee	Term of delivery order				
			FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	ESCO	$8	$8	$8	$8	$8
		Utility Co.	$90	$90	$90	$90	$90
Total payments			**$98**	**$98**	**$98**	**$98**	**$98**

Project 2. Replacement of a Coal-Fired Boiler with Efficient Gas-Fired System

Savings: • Net Energy Cost Savings

In some cases, energy use decreases in one category but increases in another as the result of energy-efficiency improvements. For example, many facilities realize large recurring energy cost savings from replacing obsolete and inefficient coal-fired boilers with highly efficient modular gas-fired systems. In this case, coal use will decrease, but natural gas use will increase.

When budgeting forward for the first year of the project's performance period, the utility accounts are adjusted, with the allocation for coal decreasing and the allocation for natural gas increasing according to the projections of energy usage in the delivery order.

The first table shows pre-project (FY-0) allocations for coal and natural gas and the adjusted allocations for the performance period (FY-1 through FY-5). The second table shows the breakdown of payments from each account. The ESCO is paid nothing from the coal account because the allocation to that account was reduced to cover only the coal cost. Regulations related to Super ESPC impose no requirements for the agency's internal accounts to individually represent actual savings.

Budget for Super ESPC Project 2 ($K)

Funding Source	Acct. No.	Term of delivery order					
		FY-0*	**FY-1**	FY-2	FY-3	FY-4	FY-5
Coal	300-1	**$32**	**$19**	$19	$19	$19	$29
Gas	303-1	**$43**	**$56**	$56	$56	$56	$56
Total funding sources		**$75**	**$75**	**$75**	**$75**	**$75**	**$75**

*FY prior to performance period of project

Payments from Project 2 accounts ($K)

Payments	Acct. No.	Payee	Term of delivery order				
			FY-1	FY-2	FY-3	FY-4	FY-5
Coal	300-1	ESCO	$0	$0	$0	$0	$0
		Supplier	$19	$19	$19	$19	$19
Gas	303-1	ESCO	$6	$6	$6	$6	$6
		Utility Co.	$48	$48	$48	$48	$48
Total payments			**$73**	**$73**	**$73**	**$73**	**$73**

Project 3. Comprehensive Energy-Efficiency Retrofit Including Chiller Replacement

Savings: **• Energy Cost Savings**
• One-Time O&M — Avoided Planned Chiller Replacement Project

Agencies may include one-time savings from avoided expenditures for energy projects that are made unnecessary by the Super ESPC delivery order project if the avoided expenditure was already planned and budgeted, with money allocated to an energy-related O&M account (although payments to the contractor may not be made from line-item appropriations for capital improvements). For example, an agency site working towards complying with environmental regulations may budget O&M funds for phased replacement of CFC chillers. If a delivery order includes replacement of a CFC chiller, making the budgeted expenditure for chiller replacement unnecessary, the budgeted amount is a one-time savings for energy-related O&M.

One-time O&M savings are often applied as one large payment at the beginning of the contract term, which can significantly reduce the amount that must be financed, thereby shortening the term of the contract and reducing interest costs to the agency.

Budget for Super ESPC Project 3 ($K)

Funding Source	Acct. No.	Term of delivery order				
		FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	$104	$104	$104	$104	$104
CFC Chillers	785-1	$322	--	--	--	--
Total funding sources		**$426**	**$104**	**$104**	**$104**	**$104**

Payments from Project 3 accounts ($K)

Payments	Acct. No.	Payee	Term of delivery order				
			FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	Utility Co.	$90	$90	$90	$90	$90
		ESCO	$11	$11	$11	$11	$11
CFC Chillers	785-1	ESCO	$320	--	--	--	--
Total payments			**$421**	**$101**	**$101**	**$101**	**$101**

Project 4. Comprehensive GHP-Centered Energy Retrofit with ESCO Assuming Maintenance Responsibility for New Systems

Savings: • **Energy Savings**
• **Recurring O&M Savings — Maintenance Subcontract**

In some cases where the ESCO assumes responsibility for maintenance of the newly installed energy-efficient equipment during the term of the contract, significant recurring energy-related O&M savings can result, as in the following example. The ESCO implements a comprehensive energy-efficiency retrofit centered on GHPs in 4,000 institutional housing units. The ESCO agrees to maintain the new equipment, replacing maintenance services that were previously subcontracted, for a price that is lower than the maintenance cost baseline (the amount the agency would have paid for maintenance had the energy project not been implemented).

Budget for Super ESPC Project 4 ($K)

Funding Source	Acct. No.	Term of delivery order				
		FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	$4800	$4800	$4800	$4800	$4800
Gas	695-2	$100	$100	$100	$100	$100
Maintenance	750-1	$1272	$1272	$1272	$1272	$1272
Total funding sources		**$6172**	**$6172**	**$6172**	**$6172**	**$6172**

Payments from Project 4 accounts ($K)

Payments	Acct. No.	Payee	Term of delivery order				
			FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	ESCO	$1500	$1500	$1500	$1500	$1500
		Utility Co.	$3200	$3200	$3200	$3200	$3200
Gas	695-2	ESCO	$100	$100	$100	$100	$100
		Utility Co.	--	--	--	--	--
Maintenance	750-1	ESCO	$1094	$1094	$1094	$1094	$1094
Total payments			**$5894**	**$5894**	**$5894**	**$5894**	**$5894**

Project 5. Upgrade of Water- and Space-Heating Equipment

Savings: • **Energy Cost Savings**
• **Recurring O&M Savings — Avoided Ongoing Equipment Renewal**
• **One-Time O&M Savings — Avoided Boiler Repair Cost**

A Super ESPC project may result in one-time and recurring energy-related O&M savings as well as energy cost savings, as in the following example. A delivery order includes work to upgrade water- and space-heating equipment in a complex of buildings, so that the central steam plant and steam lines in the area are no longer needed. The agency had been planning to tear down and rebuild the boilers in the central steam plant using funds allocated to an O&M account. Savings that are used to support payments to the contractor include

- the avoided cost of refurbishing the steam plant boilers (one-time O&M savings),

- savings from the avoided costs of ongoing renewal of the aging water- and space-heating equipment because it was upgraded (recurring O&M savings), and
- energy cost savings.

Budget for Super ESPC Project 5 ($K)

Funding Source	Acct. No.	Term of delivery order				
		FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	$300	$300	$300	$300	$300
Gas	695-2	$135	$135	$135	$135	$135
HVAC Maintenance	750-1	$90	$90	$90	$90	$90
Steam Plant Repair	760-1	$280	--	--	--	--
Total funding sources		**$805**	**$525**	**$525**	**$525**	**$525**

Payments from Project 5 accounts ($K)

Payments	Acct. No.	Payee	Term of delivery order				
			FY-1	FY-2	FY-3	FY-4	FY-5
Electricity	800-1	ESCO	$80	$80	$80	$80	$80
		Utility Co.	$210	$210	$210	$210	$210
Gas	695-2	ESCO	$35	$35	$35	$35	$35
		Utility Co.	$95	$95	$95	$95	$95
HVAC Maintenance	750-1	ESCO	$10	$10	$10	$10	$10
		Facility Maint.	$78	$78	$78	$78	$78
Steam Plant Repair	760-1	ESCO	$278	--	--	--	--
Total payments			**$786**	**$508**	**$508**	**$508**	**$508**

2.6.5 CONCLUSIONS

The foregoing discussion is intended to be useful as an introduction to the issues that may be of concern to agency finance and accounting departments in planning for a Super ESPC project. Fortunately, this information should reassure agencies that there are very few new concepts to learn in this realm, if any, and no complex rules or systems to implement.

Perhaps the most apt way to describe the regulations governing agencies' accounting for their Super ESPC projects is in terms of what is *not* required:

- There are no explicit or implicit requirements imposed on agencies by the Super ESPC program, the contract, or DOE FEMP Delivery Order Guidelines regarding the agency's internal accounting for Super ESPC projects.
- The agency is not required to demonstrate that the guaranteed savings are being delivered through accounting procedures — M&V methods are the tools for this task, and the responsibility is in most cases the ESCO's.
- Accounting for Super ESPC projects requires no procedures beyond standard accounting practice.

One simple rule applies to all Super ESPC projects and expresses the sum effect of Super ESPC regulations on the agency's internal accounting:

- Payments to the contractor come from the energy and energy-related O&M accounts that accrue savings as the result of the work done under the Super ESPC delivery order.

The payments may never exceed the savings generated by the project in any given year.

The Bottom Line

In a Super ESPC project, the most important thing to all parties is seeing that the guaranteed savings are delivered. Any ESCO that intends to stay in business will ensure long before payments begin that the design and implementation of the project will take care of that. Appropriately selected, cost-effective verification procedures are used to verify that the ECMs are performing as intended and that guaranteed savings are being delivered — overall, but not per each ECM in particular.

The ESCO carefully develops baselines, estimates the expected savings for each ECM relative to the baselines, and develops a practical and cost-effective M&V methodology to verify that the savings guarantee is met. However, the guarantee applies to the bottom line of cost savings to the agency. The bottom line in the agency's books is the corollary of proving savings through M&V. If all the energy and related O&M bills, plus the ESCO, can be paid out of the designated accounts, delivery of the guaranteed savings is established in fact.

Appendix to

Practical Guide to Savings and Payments in Super ESPC Delivery Orders

Programmatic Guidance on Energy and Energy Related Cost Savings and Contractor Payments Under Super ESPC

Federal Energy Management Program

April 29, 1999

MEMORANDUM

To: Federal Agencies

From: John Archibald, Director
Federal Energy Management Program

Date: April 29, 1999

Subject: Energy-Related Savings and Contractor Payments Guidance Document

The purpose of the attached document is to provide guidance to assist federal agencies in understanding what constitutes reasonable savings and payments under DOE's various regional and technology-specific Super ESPC programs.

FEMP has determined that besides energy cost savings, there is also statutory basis for allowing energy related operation and maintenance cost savings as a source of payments by agencies to contractors under Super ESPC. These energy-related cost savings may be recurring or one-time savings. Definitions of allowable savings and payments with examples are outlined in the document. A summary of the guidance from the document follows:

1. Cost savings shall exceed contractor payments in every year of the delivery order term.
2. Agencies shall verify and document that the funds used for contractor payments were appropriated for energy expenses (e.g., utilities) or energy related operation and maintenance expenses which would have been incurred without an energy savings performance contract. Where capital or line item funding is used in conjunction with an ESPC, agencies shall carefully document the use of these funds and ensure that payments are not made to contractors from these funds. The DOE FEMP shall not accept delivery orders under the DOE Super ESPC program that include payment of funds from capital or line-item accounts.

The basis for determination of energy and energy related cost savings must be documented and agreed upon by the Government and the contractor in the delivery order. Agencies that include recurring energy related cost savings in a delivery order should exercise due diligence to document the estimated avoided operation, maintenance, renewal, repair, or other costs for the project file. Agencies that include one-time energy related cost savings in a delivery order should exercise due diligence to document the estimated cost of the avoided Government projects for the project file.

Agencies can pursue delivery order projects which include one-time energy related cost savings and associated contractor payments for avoided Government projects that are planned and budgeted for in the near term. Agencies that choose to enter into a delivery order which includes one-time energy related cost savings, when funds for the avoided Government projects are budgeted for request but not yet appropriated, are obligating themselves to the corresponding contractor payments. These contractor payments shall be documented in the delivery order and paid in full.

Programmatic Guidance on Energy and Energy Related Cost Savings and Contractor Payments Under Super ESPC

Background

The Energy Policy Act of 1992 first established energy savings mandates for U.S. federal agencies. Executive Order 12902 established the more aggressive mandate that by 2005, all U.S. federal agencies must use 30% less energy per square foot in their buildings than they consumed in 1985. Thousands of energy efficiency and renewable energy improvement projects are needed to meet the mandate. Energy projects cost money. Rather than appropriate capital funds for all of the needed energy projects, in the Energy Policy Act of 1992 Congress authorized U.S. federal agencies to use private sector financing. One authorized source of financing is energy service companies through energy savings performance contracting (ESPC). To streamline ESPC the Department of Energy has implemented the Super ESPC program. This document provides guidance on energy and energy related cost savings and contractor payments under the DOE Super ESPC program.

The Federal Energy Management Program's (FEMP's) mission is to reduce the use and cost of energy in the Federal sector by advancing energy efficiency, water conservation and the use of solar and other renewable energy sources. FEMP accomplishes its mission by leveraging both federal and private resources to provide technical and financial assistance, mainly to other federal agencies. The Super ESPC program is specifically designed to assist federal agencies in leveraging the funds they have with private financing in order to achieve their energy savings mandates.

Each year Congress authorizes and appropriates millions of dollars to federal agency operations and maintenance accounts for implementing renovation, renewal, or repair projects in buildings. A significant share is spent on renovating, renewing, or repairing energy consuming systems in buildings so that heating, cooling, hot water, lighting, refrigeration, etc. continue to be available to support agency missions. Since these energy related operations and maintenance budgets are often quite limited, most projects are done as inexpensively as possible. There are no extra federal funds available to implement energy related enhancements that would add to the 'first cost' of most projects, even if they might be justified by a life-cycle-cost analysis. Super ESPC is available to leverage federal resources so that cost effective enhancements can be implemented, and this guidance includes several examples. Leveraging budgeted projects is among the most cost effective ways of implementing energy efficiency because most of the procurement and administrative effort and some of the needed funds were going to be expended anyway.

Purpose

The purpose of this document is to provide programmatic guidance to assist federal agencies in understanding what constitutes energy and energy related operation and maintenance cost savings and contractor payments under DOE's various regional and technology-specific Super ESPC programs.

Statutory and Regulatory Basis

There is statutory and regulatory basis for allowing energy cost savings and energy related operation and maintenance cost savings as a source of payments by agencies to contractors under Super ESPC. The specific statutory basis is 42 USC 8287a, which states that:

> "Any amount paid by a Federal agency pursuant to any contract entered into under this subchapter may be paid only from funds appropriated or otherwise made available to the agency for fiscal year 1986 or any fiscal year thereafter for the payment of energy expenses (and related operation and maintenance expenses)."

The specific regulatory basis is 10 CFR Part 436.36, which states that:

> "(a) Any amount paid by a Federal agency pursuant to any energy savings performance contract entered into under this subpart may be paid only from funds appropriated or otherwise made available to the agency for the payment of energy expenses and related operation and maintenance expenses which would have been incurred without an energy savings performance contract. The amount the agency would have paid is equal to:
>
> (1) The energy baseline under the energy savings performance contract (adjusted if appropriate under 436.37), multiplied by the unit energy cost, and
>
> (2) Any related operations and maintenance cost prior to implementation of energy conservation measures, adjusted for increases in labor and material price indices."

This programmatic guidance clarifies that energy related operation and maintenance cost savings may be recurring or one-time savings.

Definition of Energy and Energy Related Cost Savings

The two types of cost savings under Super ESPC are: 1) energy cost savings, and 2) energy related cost savings. Definitions of each type of cost savings are provided below.

Energy Cost Savings

Energy cost savings are cost savings to the Government as a result of actions including, but not limited to, less energy use, improved pattern of energy use, power factor correction, or substitution of one form of energy for another. Usually energy cost savings are ongoing after the energy cost saving measures (ECMs) are implemented, and therefore appear as annually recurring under Super ESPC. Energy cost savings to the Government must be real savings; i.e., the Government must either be spending the money currently or planning to spend the money in the future. If not, the money will not be available in the Government's energy budget for payments.

Energy Related Cost Savings

Energy related cost savings are cost savings to the Government as a result of actions including, but not limited to, less ongoing equipment operations or maintenance responsibilities or avoided project costs for renovation, renewal or repair of energy consuming systems. Usually the energy related cost savings for avoided responsibilities for operations, maintenance, spare parts, replacement-upon-failure of small equipment, and others are ongoing after the ECMs are implemented, and therefore appear as annually recurring under Super ESPC. Usually the avoided project costs for large equipment replacements or replacement of large quantities of small equipment are one-time and therefore can appear as such under Super ESPC. Energy related cost savings to the Government must be real savings; i.e., the Government must either be spending the money currently or planning to spend the money in the future, but because of the project the current

or planned spending is avoided. If not, the money will not be available in the Government's energy related operations and maintenance budgets for payments.

In many cases, the contractor may need to operate and/or maintain a system at a higher cost than the Government is currently expending because the Government may not be operating and maintaining the system properly due to budgetary limitations. In such cases, the recurring energy related savings need to be based on the actual Government planned expenditures, not what the Government would be spending if the Government were properly operating and maintaining the system.

Likewise in the case of avoided projects, the contractor may need to select much higher efficiency equipment or system types than the Government planned to install, due to budgetary limitations. In such cases, the one-time energy related savings need to be based on the actual Government planned expenditures, not what the Government would be spending if the Government were properly investing from a life cycle point of view.

Definition of Contractor Payments

Payments to contractors under Super ESPC must meet the following conditions:

- savings exceed payments in each year,
- payments are from energy (e.g., utilities) or energy related operation and maintenance accounts as determined by the agency, and
- as part of due diligence, the basis for determination of energy and energy related cost savings is documented and agreed upon by the Government and the contractor.

Examples of Contractor Payments

Contractor Payments from Energy Cost Savings:

All Super ESPC delivery order projects must include energy cost savings and contractor payments. Each year the agency budgets and requests energy funds using the existing energy costs as a baseline. Congress makes annual appropriations to agencies for payment of energy costs (electricity, natural gas, propane, oil, etc.). The agency is able to pay energy costs and the contractor out of the energy accounts because the energy cost savings derived from the delivery order project exceeds the payments to the contractor from the energy accounts. Examples of recurring energy cost savings include, but are not limited to:

Less Energy Use — As an example, an old inefficient boiler originally designed for coal but fitted with a natural gas burner 20 years ago is replaced with a bank of staged, modular, natural gas-fired condensing boilers at much higher efficiency. The avoided natural gas purchases are an annually recurring energy cost savings.

Improved Pattern of Energy Use — As an example, a chiller plant is fitted with a chilled water storage facility and modified controls so that peak period chiller operation is displaced with cool storage and night chiller operation to re-charge storage. The avoided electricity peak demand charges are an annually recurring energy cost savings.

Power Factor Correction — As an example, capacitor banks are added to balance loads on a facility’s power system. The avoided power factor penalty charges are annually recurring energy cost savings.

Substitution of One Form of Energy for Another — As an example, a natural gas line is run to the oil-fired boilers in a central steam plant, and dual fuel burners are installed so that the lowest cost fuel can always be used. Oil backup allows gas to be purchased at its commodity cost without contract demand charges. The avoided fuel costs are annually recurring energy cost savings.

Contractor Payments from Recurring Energy Related Cost Savings

Super ESPC delivery order projects may include recurring energy related cost savings and corresponding contractor payments at the Government's option. The agency and contractor look closely at the offered ECMs and determine whether the project will result in any real savings relative to the Government's years-forward energy related operations and maintenance baseline budgets. If so the avoided energy related operation, maintenance, renewal, repair, or other costs are estimated to the satisfaction of the agency and documented for the project file. The agency budgets and requests energy related operations and maintenance funds each year using existing operations and maintenance cost baseline metrics. Congress makes annual appropriations to agency accounts for payment of energy related operations and maintenance costs. The agency is able to pay the energy related operations and maintenance costs and the contractor out of the accounts because the contractor has agreed to fixed price payments that are less than what would otherwise have been spent.

Examples of recurring energy related cost savings include, but are not limited to:

Operation — As an example, the contractor upgrades space and water heating equipment in a complex of buildings such that steam lines and the central steam plant are no longer needed, and the retiring boiler operator does not need to be replaced. The avoided cost of the boiler operator (salary, benefits, workman's compensation, overhead) is an annually recurring energy related cost savings.

Maintenance — As an example, the contractor upgrades HVAC in a complex of buildings and assumes maintenance and repair responsibility, so the current HVAC service subcontractor is no longer needed. The avoided subcontract cost is an annually recurring energy related cost savings.

Renewal — As an example, the contractor replaces an aging mixed-vintage population of small packaged unitary HVAC equipment where individual units were approaching, at, or exceeding their expected service lives and the Government was planning to replace the units upon failure. The planned expenditures for "like-to-like" equipment replace-on-failure incidences are annually recurring energy related cost savings.

Repair — As an example, the contractor replaces a population of small packaged unitary HVAC equipment having significant service life remaining with substantially more efficient equipment, and assumes maintenance and repair responsibility. The planned expenditures for repair parts and materials are annually recurring energy related cost savings, but there are no personnel savings because the Government staffing level remained the same.

Contractor Payments from One-Time Energy Related Cost Savings

One-time energy related cost savings generally occur when the Government has budgeted operating funds to renovate, renew or repair energy consuming systems or modify such systems to meet environmental regulations; but the originally planned project or task will not

have to be accomplished by the Government if the contractor performs the proposed delivery order. In the case of avoided renewal and repair projects one-time energy related cost savings generally applies to renewal and repair of larger equipment items, as opposed to many small unitary packages, or repair parts and materials, which may be more appropriately considered as annually recurring energy related cost savings. Examples of one-time energy related cost savings include, but are not limited to:

Renovation — As an example, the contractor upgrades space and water heating equipment in a complex of buildings such that steam lines in the area are no longer needed. The Government was planning to renovate one of the buildings this year using planned and budgeted in-hand appropriations in an operations and maintenance account. As part of that, a steam line under a wing of the building was to be abandoned, and a new line run around the wing, so that the discomfort of occupants and excessive cooling costs of the wing could be avoided in the future. The new steam line is no longer needed. The planned expenditure for the new steam line is a one-time energy related cost savings, payable in the year it was budgeted.

Renewal — As an example, the contractor replaces an aging CFC-based chiller as part of a multi-ECM project. The Government was planning a "like-to-like" replacement with a non-CFC chiller this year using planned and budgeted in-hand appropriations in an operations and maintenance account. The Government no longer needs to implement the originally planned project. As added benefits, the new chiller can be smaller because of the lighting upgrades and other ECMs, and maintenance of the chiller is the responsibility of the contractor over the delivery order term. The planned expenditure for the "like-to-like" chiller replacement is a one-time energy related cost savings.

Repair — As an example, the contractor upgrades space and water heating equipment in a complex of buildings such that steam lines and the central steam plant are no longer needed. The Government was planning to tear down and re-build the boilers in the central steam plant using planned and budgeted appropriations in an operations and maintenance account. The avoided boiler refurbishment expenditures are a one-time energy related cost savings.

Contractor Payments from capital costs or line item accounts

Contractor payments for energy and related operations and maintenance savings are not to be made from capital project funds or line item accounts. Agencies are required to install the most life-cycle energy efficient equipment as part of any capital or line item improvement. However, capital and line item budgets do not always allow the most life-cycle energy efficient equipment to be purchased. In those cases where a contractor can provide energy efficiency improvements to the capital equipment at the time of its design and installation, the contractor can be paid from energy and related operations and maintenance savings that are delivered as a result of implementing energy conservation measures in conjunction with the installation of capital equipment.

Guidance

Based on the above examples, DOE FEMP has established the following guidance for determining when energy cost savings and energy related operation and maintenance cost savings can be accounted for and used as contractor payments under the Super ESPC program. All such cost savings and contractor payments must meet the applicable statutory and regulatory requirements found in 42 U.S.C. 8287, Sections 801 to 804; and 10 C.F.R.

Part 436. The summary guidance metrics to consider before implementing a delivery order project are as follows:

1. Cost savings shall exceed contractor payments in every year of the delivery order term.

2. Agencies shall verify and document that the funds used for contractor payments were appropriated for energy expenses (e.g., utilities) or energy related operation and maintenance expenses which would have been incurred without an energy savings performance contract. Where capital or line item funding is used in conjunction with an ESPC, agencies shall carefully document the use of these funds and ensure that payments are not made to contractors from these funds. The DOE FEMP shall not accept delivery orders under the DOE Super ESPC program that include payment of funds from capital or line-item accounts.

3. The basis for determination of energy and energy related cost savings must be documented and agreed upon by the Government and the contractor in the delivery order. Agencies that include recurring energy related cost savings in a delivery order should exercise due diligence to document the estimated avoided operation, maintenance, renewal, repair, or other costs for the project file. Agencies that include one-time energy related cost savings in a delivery order should exercise due diligence to document the estimated cost of the avoided Government projects for the project file.

4. Agencies can pursue delivery order projects which include one-time energy related cost savings and associated contractor payments for avoided Government projects that are planned and budgeted for in the near term. Agencies that choose to enter into a delivery order which includes one-time energy related cost savings, when funds for the avoided Government projects are included in a budget request but not yet appropriated, are obligating themselves to the corresponding contractor payments. These contractor payments shall be documented in the delivery order and paid in full.

3. Working With FEMP and Budgeting Agency Resources

Contents

3. Working with FEMP and Budgeting Agency Resources

3.1 INTRODUCTION

This chapter draws on the experience of FEMP Service Network (FSN) Contracting Officers, Contracting Officer's Representatives, Legal Counsel, and Project Facilitators in sharing some "lessons learned" that have proven critical to agencies' efforts to develop successful Super Energy Savings Performance Contract (ESPC) projects. Among the lessons learned is the importance of realistically assessing the investment of agency effort and resources necessary during delivery order development and project implementation. The success of the project depends on the agency's commitment of adequate resources — drawn from within the agency, from FSN, or elsewhere — to ensure sufficient support to both ongoing agency missions and the Super ESPC project.

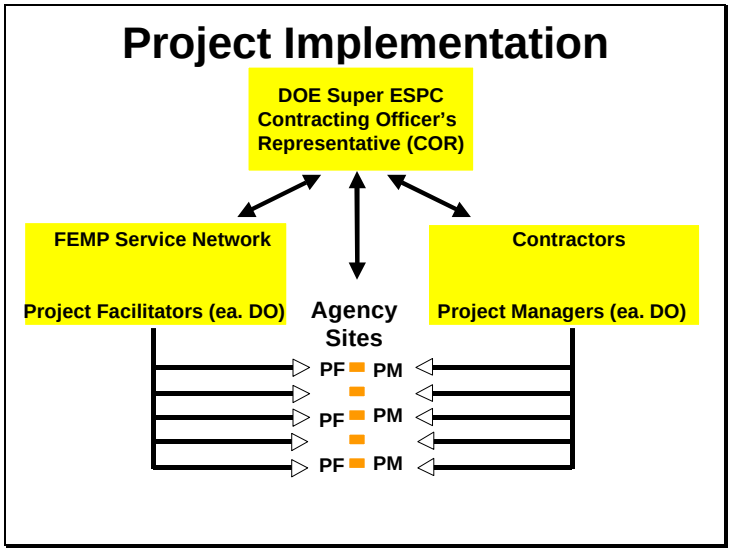
Chapter 4 is a step-by-step description of the process of developing and implementing a Super ESPC project. Together, Chapters 3 and 4 are intended to provide agency acquisition teams with the background needed to accurately estimate their organization's resource requirements for getting through the delivery order process in a timely fashion. Super ESPC is used most effectively when agency management fully understands the resource requirements, makes a commitment at the outset to allocating the necessary resources, and makes acquisition teamwork a high priority for team members. The chapter also addresses FSN's role in providing support and technical assistance to agencies and the means of obtaining FSN services, as well as strategies for optimizing the effectiveness of agency acquisition teams.

This chapter also focuses on the dynamics of establishing a productive and cooperative partnership with an energy service company (ESCO). Several examples of low-cost techniques for surveying the field of qualified ESCOs are given, and techniques and procedures which agencies should avoid are discussed.

The roles and responsibilities of each of the participants in Super ESPC projects are summarized at the end of the chapter.

3.2 DOE, FEMP, AND FSN ASSISTANCE

The figure on the following page sketches some of the relationships between agencies, ESCOs, and FEMP staff. The DOE Procurement Contracting Officer (PCO) has overall responsibility for the Super ESPCs and sole authority to modify the contracts (though the PCO is not represented on the figure). The PCO delegates signature authority for delivery orders and contract administrative functions to the agency in many cases and also delegates many responsibilities to the Contracting Officer's Representative (COR).



The agency initially works with a DOE COR. One COR is appointed for each group of regional and technology-specific Super ESPC contracts. The COR is DOE's coordinator of the Super ESPC process and is the agency's guide to procedural issues. A Project Facilitator is assigned to each project to provide or coordinate technical assistance to the agency, except in rare cases where the agency has demonstrated to DOE the capability to effectively utilize Super ESPC without assistance.

The ESCO's efforts at the site are led by a project manager, and the agency's contributions are delivered by the agency acquisition team, which includes at least the agency's Contracting Officer (CO) and a Site Technical Representative (STR). Usually the acquisition team also includes representatives of site organizations that are affected by or interested in the project, such as facility management, engineering, maintenance, budget and finance, labor relations, health and safety, and others. The agency's acquisition team is usually led by management or management's designee, which is often the STR or CO.

3.3 THE ROLE OF FSN IN SUPER ESPC PROJECTS

FSN has a central role in the Super ESPC program. The mission of FSN is to provide assistance to federal agencies in the use of DOE's contracts and technical services for improving energy efficiency, water conservation, and use of renewable energy in their facilities. FSN is a virtual organization of several partners, including DOE offices, DOE national laboratories, DOE Regional Offices, and private-sector contractors. FSN musters the collective technical and procurement expertise of these partners to provide comprehensive service to federal agencies looking for assistance with their energy and water projects. The goal of FSN in Super ESPC projects is to lead agencies through the process of developing and implementing their delivery orders to ensure that projects are completed successfully, in a timely manner, and deliver the best value to the agency.

FSN was created after Congress directed FEMP to develop ways to provide technical assistance to federal agencies on a reimbursable basis. Since 1998 Congress has annually authorized DOE, in the Interior appropriations bill, "to accept funds from other agencies in

return for assisting agencies in improving energy efficiency in federal facilities and operations through the use of private financing mechanisms," such as energy savings performance contracts (ESPCs) and utility energy services contracts (UESC). FSN is exempted from the Miscellaneous Receipts Act and the Economy Act, which means that agencies can use FSN's services without having to document or certify that FSN is the sole acceptable source of such services. Agencies obligate themselves to reimburse DOE for FSN's services through the Interagency Agreement, which must be signed and accepted before the project can progress past the preliminary stages. Interagency Agreements are discussed in the following sections.

3.3.1 Working with the DOE COR to Establish Agency Commitment

The DOE COR is the agency's first point of contact to obtain FSN services. The COR, who can be contacted through the Regional Office, works with agencies as they take their first steps toward developing a Super ESPC project, providing the education and technical resources needed to explore whether a Super ESPC project is feasible for the site and is the best option for meeting the agency's needs. If the answer is yes and the agency chooses to proceed, the COR helps to educate staff in the agency's finance, contracts, and facilities departments about performance contracting. Agency champions for the project and the COR work to build support in the organization, with the goal of gaining the consensus and management approvals needed to establish an Interagency Agreement (IAG) between DOE and the agency. After the IAG is in place, an FSN Project Facilitator is assigned to coordinate the delivery of FSN services, and the project can begin to build momentum.

3.3.2 The Interagency Agreement (IAG)

Completing and signing an IAG with DOE signals the agency's firm intention to commit resources to pursue a Super ESPC delivery order. Effective pursuit of a delivery order requires management to designate an acquisition team and leader, to establish the delivery order as a priority for team members, and to obligate funds to support the agency team and FSN services as defined in the IAG. An IAG must be signed and accepted before the Project Facilitator is assigned and the agency and ESCO begin the formal procedures of developing a delivery order. The IAG specifies the services that FSN will provide in support of the agency's use of the Super ESPC and obligates the ordering agency to reimburse DOE for those services. An IAG consists of a standard form, a letter verifying that the agency has the funds to fulfill the agreement, and a statement of work describing FSN services. Any optional services the agency chooses are also described in the IAG. (A standard form for the IAG is provided as Attachment 2.)

The cost of FSN services is tied to the level of effort and support provided. The standard package of basic services for ESCO-identified projects, preferred by most agencies, carries a fixed price of $30,000. The cost of optional services is based on FSN's hourly rate of $90. FSN's basic service offerings are briefly discussed in Sect. 3.6 and described in more detail in Chapter 4. FSN's statements of work for basic services and a list of optional services are provided in Attachment 5.

3.4 FORGING GOOD-FAITH RELATIONSHIPS AND CHOOSING AN ESCO

One of the COR's responsibilities is to oversee and control the interchange of informal communications and initial proposals between ESCOs and agencies. For example, the COR must grant approval before an ESCO may submit an initial proposal. Before giving the ESCO the green light the COR must be convinced that the agency is sufficiently committed, capable, and well informed to seriously entertain a proposal for a single-source delivery order award. Agency commitment is demonstrated by signing the MOU and IAG.

The requirement for COR approval has a role in maintaining good-faith relationships with the Super ESPC prime contractors and in perpetuating the program's capability to foster energy-savings projects for federal agency customers. The Super ESPCs are structured with the interests of the federal customer firmly in mind, and the indefinite-delivery, indefinite-quantity contracts (IDIQs) allocate the greater share of the business risk to the ESCO. An ESCO may spend more than $1 million on initial and revised final proposals for a $30 million project, at no obligation to the agency until the delivery order award is signed. The COR's oversight role helps to ensure that agencies are genuinely willing and able to entertain a proposal before the ESCO puts its resources at risk.

The agency has the right to reject any initial proposal and is expected to do so (or work with the ESCO toward a satisfactory proposal) if its technical approach is poor, the energy-conservation measure (ECM) scope could (in the opinion of the agency) meet the agency's needs in a pay-from-savings project but currently fails to, or it appears to be a poor business deal. Absent these problems, the COR's oversight is intended to focus FEMP and ESCO resources where successful projects are the likely outcome.

Costs incurred by the ESCO prior to receiving the Notice of Intent to Award are only recoverable in their general company overhead accounts. Costs incurred after receiving the Notice of Intent to Award are only recoverable in the delivery order implementation price if the project is pursued. If the project is not pursued, these costs can only be recovered in the ESCO's company general overhead accounts. This means that these substantial costs can only be recovered in the markups charged on future delivery orders, if any. If the ESCO recovers large costs in the company overhead account, this will drive up prices generally.

Maximum markups are established in the IDIQ contracts awarded to each ESCO, but agencies are encouraged to negotiate lower markups on individual delivery orders if possible. If ESCOs are forced to bear unnecessary costs because agencies fail to pursue projects in good faith or in a timely and businesslike manner, agencies pursuing projects later will be unable to negotiate lower markups. An important part of the COR's oversight role is to allow only agencies committed to effectively using the Super ESPC program to play on the contracts, so that participating agencies can implement their projects as cost-effectively as possible.

3.4.1 Informal Communications to Survey Qualified ESCOs

While agencies must guard against abusing the strength of the Super ESPCs, and it is explicitly prohibited for agencies to compete or "auction" projects solely for the purpose of getting a better price, it is also recognized that agencies may well be reluctant to choose an

ESCO before they explore their options to some extent. Developing a Super ESPC project involves entering into a long-term partnership with an ESCO, and there is every reason to choose carefully.

The agency has the right to participate in informal communications with several or all of the prime contractors before deciding which one to do business with. There are numerous acceptable (and inexpensive) ways to survey the field of ESCOs. For example, agencies have held 90-minute conference calls with each of several ESCOs, coming prepared with questions to determine which one offered the capabilities most in line with agency needs. ESCOs often make marketing calls to agencies that are exploring their options, and agencies may invite other ESCOs to make marketing calls. Some agencies send inquiries to the group of ESCOs holding IDIQ contracts asking for a limited amount of information about the ESCO's technical strengths, management approach, or other factors that will help the agency find the best partner for a project at a specific site. In some regions the COR sends one- or two-page qualifications statements on each of the prime contractors to agencies that inquire about Super ESPC projects.

3.5 AGENCY RESOURCE PLANNING

Agencies preparing to initiate a Super ESPC project and sign an IAG are advised to plan carefully for the project. A full awareness of the work that will be required of the agency and realistic expectations of FSN standard support services are the most important tools for assessing the agency's resources and its needs to acquire optional services from FSN. A Super ESPC project is like any other facility improvement or construction project in that significant analysis, engineering, and coordination efforts will be required. Planning for allocation of the agency's resources will ensure that the ESPC project as well as the agency's ongoing primary missions are given sufficient support to succeed.

Optional services offered by FSN have proven in many cases to be important to the agency's efforts to keep the project on track and on time, minimizing costs to the agency and the ESCO (thereby keeping costs low for the ESCO's succeeding energy projects for federal agencies). Agencies should assess whether they will be able to perform their responsibilities throughout the Super ESPC delivery order process in a timely manner before choosing optional services, which will be enumerated in the IAG. Factors to consider include in-house experience and capability and agency/site workload. The COR, supported by FSN technical personnel, will assist the agency in determining whether services beyond the basic support services described in FSN's standard statements of work would be cost- and resource-effective. If so, the optional services will be added to the standard statement of work and attached to the IAG, which obligates the agency to reimburse DOE for all agreed-upon FSN services.

3.5.1 Estimating the Needed Agency Effort

Agencies planning to undertake a Super ESPC project can benefit from the accumulated observations of FSN Project Facilitators. Based on Project Facilitators' interactions with acquisition teams to date, the overall effort required of the agency acquisition team to see a project through — from the initial kickoff meeting until installation/construction has been

inspected and accepted — is about 800 hours, or 0.5 FTE. This assumes it is the acquisition team's first delivery order, the project is ESCO-identified and of modest size ($3 – 8 million project investment), and that FSN provides only basic services (which means that the agency does most of the work and relies on FSN primarily for consulting services).

Projects vary widely in terms of which acquisition team members expend greater or lesser effort, but generally the duties of the Site Technical Representative (STR), who is typically the acquisition team chairperson, consume the greatest amounts of time. The STR is usually the site energy manager or from an engineering department and is the principal contact person for the both the ESCO Project Manager and the FSN Project Facilitator. The Contracting Officer can also lead the project for the agency, but the technical lead is still required to provide significant input (in developing the delivery order RFP, reviewing proposals, reviewing the ESCO's design submittals, etc.). Acquisition team members have varying roles, depending on the agency's individual circumstances, but generally more effort is expended by engineering and contracting staff and less by finance and legal staff.

3.5.2 Firm Agency Commitment Controls Costs

Experience also shows that the amount of effort required of agency staff is influenced by many factors. All things being equal, about the same effort is required for a $3 million project as for an $8 million project, but the ironic fact is that the amount of agency resources expended is usually inversely proportional to the agency's ambition for project success. Costs are minimized when the organization is wholly committed to getting a project off the ground. Lack of buy-in from site management and the individual acquisition team members' managers can be a formidable obstacle, resulting in back-tracking and other unproductive activities that occupy staff time without producing any progress.

It is critical for the agency champions of the Super ESPC project to communicate with senior officials at the first opportunity and secure the commitment of those who are responsible for achieving the facility's energy goals and are positioned to authorize the project, commit resources to meet timelines, and demand on-time completion of the delivery order process. Where an agency champion for the project has the authority and inclination to make timely decisions, can effectively lay the groundwork for gaining approval up the entire chain of command, and steadily pushes the project along, time and effort are saved for the acquisition team, costly delays are avoided, and the value of the project to the agency is maximized.

3.6 FSN SUPPORT AND TECHNICAL SERVICES

FSN is intended to be a "one-stop shop" for agencies that need assistance with energy or water projects and offers a full range of resources and technical assistance for developing Super ESPC delivery orders. An FSN Project Facilitator, assigned after the IAG is in place, guides the agency through the entire process of developing and implementing a Super ESPC delivery order. Services address every phase of the process from facilitating the kickoff meeting through construction and include review of the first measurement and verification (M&V) report on performance of the installed ECMs.

The Project Facilitator makes available an impressive array of expertise, including access to staff at the DOE national laboratories who have both technical and Super ESPC expertise. Services can range from brief consultations and reviews to full turnkey performance, depending on the circumstances of the particular agency site. FSN's role is primarily to provide expert and objective assistance and consulting and to lead, rather than carry out, project tasks. The Project Facilitator's experience with Super ESPC projects and disinterested position also allow him or her to act as an advocate and equalizer in the balance between ESCO and agency when necessary, although good-faith dealings and high ethical and professional standards in these relations are the rule rather than the exception.

3.6.1 FSN's Three Standard Statements of Work for Basic Service Offerings

FSN offers three different sets of basic services, each of which is detailed in a standard statement of work to be attached to the IAG. For ESCO-identified or agency-identified projects, FSN Project Facilitators directly provide or coordinate the resources to provide comprehensive technical assistance in every phase of the delivery order process. Some agencies may qualify for the minimum standard service level, which represents DOE's basic costs of administering the Super ESPCs without providing any technical assistance.

These three basic service packages are discussed briefly below and are detailed in the standard statements of work in Attachment 5. However, FSN's services are best understood in the context of the delivery order development process. Chapter 4 provides a step-by-step description of the process an agency will experience in developing a delivery order. FSN standard and optional services for each phase of the process are described in the overview along with the agency's tasks.

FSN Basic Support Services for Agency-Identified Projects — $50,000

The standard FSN support services for an agency-identified project are offered for a fixed price of $50,000. Agency-identified projects require significantly more work on the part of the agency and more technical assistance from FSN than ESCO-identified projects. The additional effort relates to the need for the agency to define the project opportunity sufficiently for ESCOs to develop initial technical and price proposals, additional DO RFP effort to define initial proposal content requirements and evaluation criteria, and additional effort to evaluate multiple proposals to select an ESCO to partner with. FSN's scope of work includes advising agency personnel as they develop a Site Data Package to define the project opportunity, wrestling with proposal content and evaluation criteria definitions, and evaluating multiple proposals. These represent significant incremental efforts on the part of FSN over those required for ESCO-identified projects. (See Section 4.4 for a discussion of agency-identified projects.)

FSN Basic Support Services for ESCO-Identified Projects — $30,000

Experience to date indicates an agency preference for ESCO-identified projects. ESCO-identified projects save agencies the expenses of defining the project opportunity, reduce DO RFP effort, and reduce the number of initial proposals that need to be evaluated from five or six to one. The price for FSN's basic support services for an ESCO-identified project is $30,000.

The Minimum Assistance Package — $10,000

The minimum standard service level is for agencies with sufficient in-house experience and capability to develop a Super ESPC delivery order without technical assistance. Agencies with internal ESPC support centers that have demonstrated their ability to lead their acquisition teams through the process without technical assistance from FSN may qualify and be approved to use the DOE Super ESPC contracts for $10,000 per delivery order.

FSN Optional Services

Optional services may be added to any of the standard statements of work. To establish the price for the optional tasks, the FSN representatives (usually the COR and technical personnel) and agency agree on the FSN staff hours to be applied, which is multiplied by the FSN's standard hourly rate of $90.

3.7 ROLES AND RESPONSIBILITIES

This section summarizes the roles and responsibilities of DOE, the ordering agency, and the contractor in a Super ESPC project.

3.7.1 Department of Energy

DOE staff who work with Super ESPCs include a Program Manager (DOE PM), Procurement Contracting Officers (PCOs), and a staff of technical, financial, legal, administrative, and procurement specialists who work with them. The Program Manager and cognizant PCO assign a member of the staff to serve as the Contracting Officer's Representative (COR). Currently all CORs are associated with DOE Regional Offices.

Contract Tracking and Oversight

DOE tracks and guides contract performance over the life of the contract. The PM, PCOs, and CORs employ several methods and tools in collaboration with agency monitoring and evaluation efforts. These tools include the following:

1. **In-Process Reviews**. In-process reviews are conducted as required. These reviews are designed to show that the services provided by the contractor meet the requirements of the contract, to ensure the work is on schedule, and to raise and resolve any issues encountered during delivery order execution.
2. **Monthly Status Reports**. The contractor is generally required to develop and submit monthly work schedules for on-site work.
3. **Central Contract/Delivery Order File**. The DOE PCO maintains the central file for each contract. The file contains each delivery order, delivery order modifications, correspondence, performance evaluation results, and the status of the contract ceiling.

DOE Program Manager's Responsibilities

- Collaborate with the DOE PCO and COR to review technical and programmatic aspects of the contract and provide technical assistance.
- Manage programmatic issues between DOE offices, agencies, Congress, and other Administration officials.

- Manage program technical resources within DOE, including DOE laboratories, to provide technical assistance to agencies.
- Sign, or designate a DOE representative to sign, Memorandum of Understanding with agencies.

The DOE Procurement Contracting Officer

The DOE Procurement Contracting Officer has overall responsibility for the contract and sole authority to modify the contract terms, conditions, and requirements, or to delegate the following responsibilities:

- Signature authority for delivery orders (always delegated to agency CO).
- Contract administration functions.
- Contracting Officer Representative functions.

The PCO's roles and responsibilities also include the following:

- Lead negotiations on prices, terms and conditions for delivery orders with participation of agency CO when ordering authority is retained; serve as an advisor to agency CO when ordering authority is delegated.
- Monitor, maintain, and provide to other agencies information regarding the status of the contract ceiling and delivery orders issued under the contract.
- Provide other agency contracting officers authorization to issue each delivery order if sufficient order capacity remains under the contract.
- Maintain past performance information on the contractors.
- Provide advice and assistance on contractual matters to the agency.

Contracting Officer's Representative (COR) Responsibilities

- Act as an interface between agencies and the DOE.
- Coordinate the execution of MOUs and IAGs with agencies.
- Assist the DOE PCO by coordinating delivery of DOE technical assistance to agencies as they proceed through the delivery order process.
- Act as focal point for ESCO requests to submit contractor-identified projects. Manage a tracking system on contractor identified projects.
- Disseminate information about the Super ESPC program to other agencies.
- Advise the DOE PM, DOE PCO, and the agencies of issues related to the contracts and specific delivery orders.
- Assist agencies and the DOE PCO in resolving issues that may arise pertaining to performance of the contractors.

3.7.2 Ordering Agency

DOE program staff have oversight and management responsibility to ensure that Super ESPC projects conform to regulations, but ordering agencies have the ultimate responsibility to ensure that the project serves the best interests of their organization and are consistent with the ESPC legislation and regulations. Agencies are expected to proactively analyze the

factors that will determine whether an ESPC is the appropriate contractual vehicle for addressing the agency's needs and circumstances.

Prior to initiating a delivery order, agencies are encouraged to consider (1) facility closure, expansion, and future utilization; (2) environmental constraints (CFCs, PCBs, asbestos); (3) mission changes; (4) conflicts with other contracts; (5) economic analysis and project feasibility; (6) other means of developing and financing their energy efficiency projects; and (7) any other unique facility issues.

Agencies' responsibilities in the Super ESPC process also include the following:

1. Finalize the MOU and IAG with DOE.
2. Appoint a Delivery Order Acquisition Team including, at a minimum, an agency CO and Site Technical Representative (STR). The STR serves as the principal point of contact on technical matters.
3. Document agency and site-specific requirements in the form of a DO RFP.
4. Select a prime contractor to perform the work in accordance with the IDIQ Super ESPC contracts and these *Guidelines*.
5. Inform the DOE PCO of the estimated value of the delivery order and obtain authorization prior to issuing a DO RFP to ensure that sufficient ordering capacity remains in the contract to cover the award.
6. Issue a Notice of Intent to Award to the selected contractor, who responds by performing a Detailed Energy Survey (DES) and submitting a revised final proposal and supporting documentation as specified in the DO RFP.
7. Review the revised final proposal and supporting documentation, identify areas needing negotiation, and prepare for negotiations.
8. Agency CO leads negotiations on prices, terms, and conditions for delivery.
9. Verify that all pre-award requirements have been met, notify Congress before the award of any delivery order having a cancellation ceiling greater than $750,000, and award the delivery order.
10. Provide the contractor and the DOE PCO a copy of the signed delivery order after issuance via a delivery order transmittal letter.
11. Hold a kickoff meeting to define procedures for contractors for contacting agency site representatives, obtaining access to the site, etc. Document the procedures and provide a copy of the procedures to the COR.
12 . During the implementation period, maintain communications with the contractor, provide site access, coordinate necessary utility interruptions, inspect construction, and review, approve, and accept all items under the delivery order in accordance with contract and delivery order terms.
13 . During the performance period, provide contract administration in accordance with contract and delivery order terms including being trained; participating as agreed in operation, maintenance, and repair; processing invoices and paying the contractor; and verifying that over agreed intervals the guaranteed level of energy and related operation and maintenance cost savings was delivered.

14 . Terminate the performance period in accordance with contract and delivery order terms.

3.7.3 ESCO Responsibilities

The principal role of the ESCO is to perform the work described in the awarded delivery orders. The ESCO's roles and responsibilities include the following:

1. In the case of government-identified projects, respond to a DO RFP with an initial proposal and, if selected, revise proposal based on DES; negotiate in good faith to DO award; and implement DO project.
2. In the case of contractor-identified projects, obtain COR approval to submit initial proposal and, if the government proceeds, revise proposal based on DO RFP and DES; negotiate in good faith to DO award; and implement DO project.
3 . Satisfy the requirements set forth in the Super ESPCs and delivery orders.

4. Overview of the Delivery Order Process

Contents

4. Overview of the Delivery Order Process

4.1 ESCO-IDENTIFIED PROJECTS

4.1.1 Goals of the Overview

The following overview describes the process an agency will experience in developing and implementing a Super ESPC delivery order, from the early, exploratory stage through the end of the contract term. The overview includes all the significant tasks and steps and also describes FSN basic and optional services.

This overview is intended as a user-friendly reference for agency acquisition teams, to help them plan and carry out their projects by providing a framework for understanding

- the purpose and function of each step of the process,
- how FSN services are integrated into that process,
- the extent to which agency resources are taxed by a Super ESPC project, and
- where FSN standard and optional services can effectively augment agency resources.

The goal for this overview is to provide useful information to acquisition team members who are assessing the extra workload the ESPC project will impose, assessing the ability and capacity of in-house resources to carry the load (plus support ongoing agency missions), and determining which optional FSN services will be cost-effective investments in technical assistance.

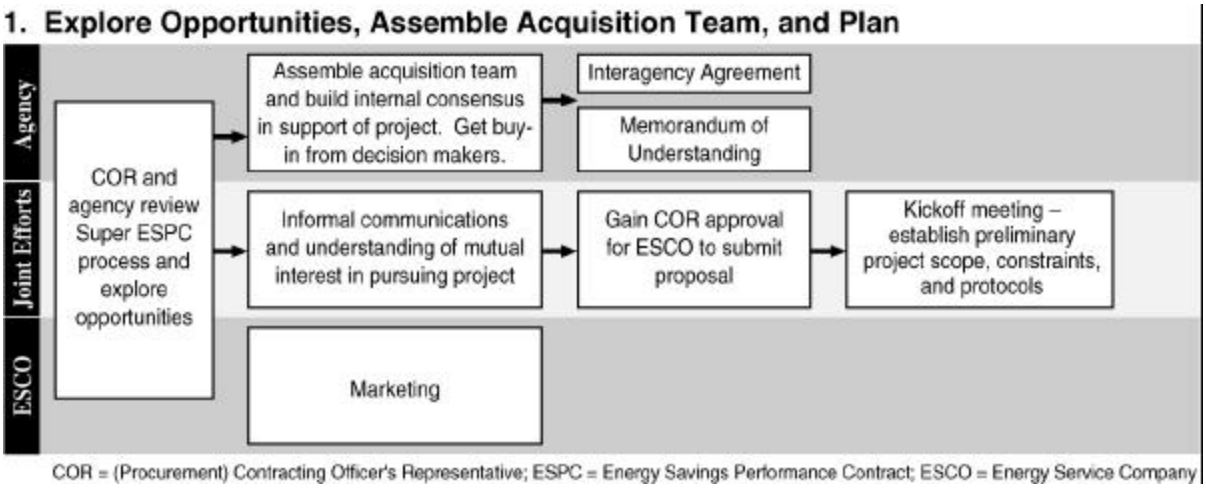
4.1.2 Elements and Limits of the Overview

This overview describes an ESCO-identified project, procured from a single source. This description of the process assumes that the project proceeds to a successful conclusion, without major detours (such as a decision not to proceed after reviewing the initial proposal). Agency tasks are summarized together with descriptions of FSN basic and optional services. FSN services are listed by the task numbers used in FSN's statements of work, which can be found in Attachment 5.

Developing a Super ESPC project is not a precisely linear process, and each project is unique in any case. Although the numbered steps in the overview imply a certain chronology, agencies typically undertake several of the enumerated tasks simultaneously, and the ESCO and agency work in parallel throughout the process. The flowcharts for each project phase depict the ESCO's and agency's parallel paths and their joint efforts schematically.

All significant tasks are included in the overview, but some details are omitted. Readers are referred to the IDIQ contracts or other sections of these *Guidelines* for more information where appropriate. A list of the IDIQ contract sections that define required proposal contents, evaluation criteria, and procedures for awarding delivery orders is provided at the end of the overview.

Phase 1: Assemble Acquisition Team, Plan, and Partner with an ESCO



1.1 Contact a DOE Regional Office

A DOE Contracting Officer's Representative (COR), who can be contacted through the DOE Regional Office, is the first point of contact for agencies interested in using the Super ESPCs. The COR is the agency's guide in this earliest stage of project development. The regions covered by each DOE Regional Office and contact information are given in Attachments 3 and 4. (See also Section 3.3 for a discussion of this phase.)

At this stage of the project, the COR will educate the agency about its options and the costs, providing information on the available financing strategies and determining whether a Super ESPC is the contractual vehicle that best meets the agency's needs. The COR will coordinate assistance (primarily long-distance consultation or review of existing information assembled and sent out by the agency) to explore whether the agency's facilities and circumstances indicate that a Super ESPC project would be feasible. If the indications are positive, the COR will coordinate assistance to help the agency assess the resources required, choose optional FSN services, and develop a Memorandum of Understanding (MOU) and an Interagency Agreement (IAG).

1.2 Assemble Agency Acquisition Team and Build Support

The acquisition team will steer the agency's efforts in developing the project, build support and consensus for the project inside the agency, and obtain the necessary management approvals. The acquisition team must include at least an agency contracting officer and a Site Technical Representative (STR). The STR serves as the principal point of contact on technical matters pertaining to the delivery order.

Candidates for the acquisition team are representatives of the organizations that are affected by or have some input to the project, including facility management, building engineering,

design/construction engineering, procurement, budget and finance, legal, labor relations, health & safety, environmental waste & management, utilities or public works, and maintenance departments. To keep the team to a manageable size, a common strategy is to have a small core team that involves representatives of the various affected organizations who are called on when expertise in their specialties is needed.

It is crucial to include decision makers who have the authority to approve a Super ESPC project. As early in the process as possible, acquisition team members should identify and begin to work with these decision makers to educate them about the Super ESPC program, familiarize them with the site's plans, and ensure that they have all the information they need to approve the project.

1.3 Informal Communications with ESCOs

Through informal communications, the agency and ESCO agree to take the first steps toward developing a delivery order. A Super ESPC project is a long-term partnership between the agency and the ESCO, requiring effective communication and close cooperation. The value of a partner that will work well within this collaboration will be measured in time and money saved and stress avoided. Agency staff may want to meet informally with several ESCOs before deciding which one will work most compatibly with the agency. (See Sect. 3.4 for a discussion of low-cost strategies for surveying the ESCOs holding the Super ESPC contracts before choosing one.)

1.4 Memorandum of Understanding (MOU)

An MOU between DOE and the ordering agency is required before the agency may issue a delivery order. The MOU establishes an agreement between DOE and the agency customer on the division of responsibilities in pursuing a delivery order award. Many agency sites are already covered by a national or regional MOU between their agency and DOE. Check the FEMP web site at http://www.eren.doe.gov/femp/ to determine whether this is the case. (Attachment 1 is the standard MOU.)

1.5 Interagency Agreement (IAG)

Establishing sufficient management support and consensus in the agency to finalize and sign the IAG could be considered the first major milestone of the project. After the IAG is in place, an FSN project facilitator is assigned to coordinate support to the agency. The IAG specifies the services DOE will provide and establishes the terms for DOE's reimbursement by the agency for its services. The IAG includes a standard statement of work describing the basic services FSN will provide plus descriptions of any optional FSN services the agency chooses. (See Sect. 3.3 and Attachment 5.)

1.6 DOE Contracting Officer's Representative Approval

The COR's role is to oversee the early stages of a Super ESPC project to ensure that the process serves the program's intended purpose of promoting successful projects to deliver best value to the government. This entails efforts to ensure that the agency is making

informed decisions and that the program's resources, including the ESCOs, are used appropriately.

To minimize the chances of ESCOs investing in initial proposals that are unlikely to be given serious consideration (thus controlling costs to the ESCO and ensuring the ESCO's ability to offer the best value to its agency customers), the COR will look for indications that the groundwork for a successful project has been laid. Before the COR will grant the required approval for an ESCO to submit an initial proposal, he or she will be convinced that the agency is genuinely committed, willing, and able to seriously entertain a proposal for a single-source, ESCO-identified project. Commitment is demonstrated by signing an IAG obligating funds to FSN to cover agreed-upon services; designating an acquisition team and obligating funds to cover their time; and having line management make the timely completion of the delivery order a priority for each member of the team.

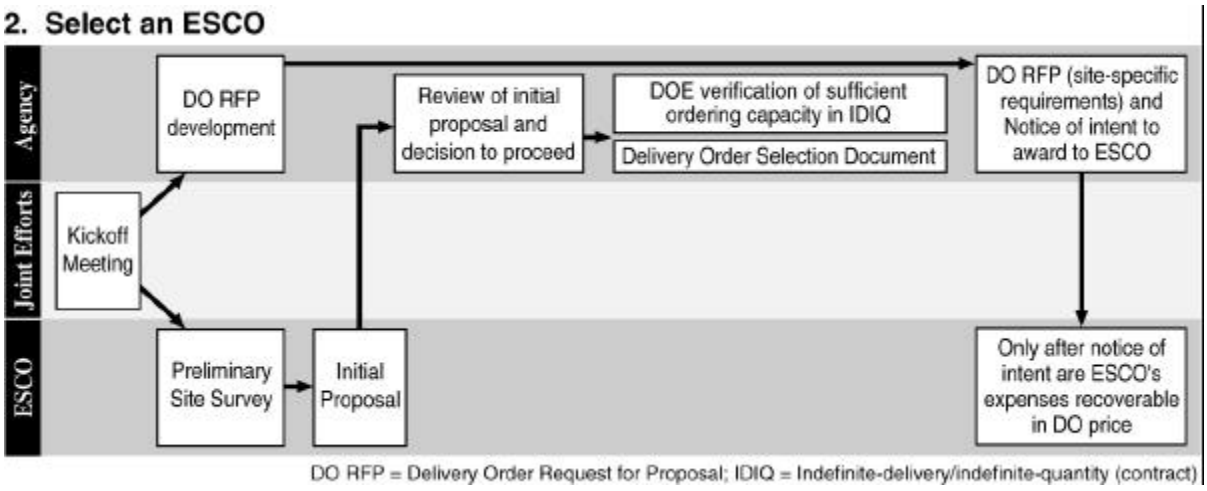
Summary of Phase 1 Tasks and FSN Services

The agency's tasks and FSN's basic service offerings in Phase 1 are focused on the following objectives: (1) summon the critical mass of support in the agency needed to initiate a project, (2) establish the preliminary scope and goals for the project, and (3) determine whether a project is economically feasible. The basic services on FSN's statement of work for ESCO-identified projects are briefly described below, listed by their task numbers on the statement of work. No optional FSN services are generally required or offered at this stage.

Agency Responsibilities	FSN Basic Services
Agency provides site data requested by FSN staff, typically 1-2 years of monthly utility bills, past energy audits, building list and maintenance records, and facility condition assessments.	**1-1 Energy potential assessment.** FSN analyzes all available information to evaluate savings potentials and determine whether the site is a good candidate for an ESPC. Provides recommendations as needed to improve project economics.
Provides to FSN staff draft key points of agency site needs (e.g., specific equipment retrofits, improving facility operating conditions) including initial project scope (e.g., number of buildings, total square footage, annual energy costs, utility rates) for discussion.	**1-2. Needs assessment and project scoping.** Consultation to review agency-identified needs and resources and recommend scope of project to match resources, goals, and objectives.
Develops initial plan and objectives for energy project implementation for FSN review. Coordinates with key acquisition team members to accomplish telecons with FSN staff and DOE COR to discuss energy project acquisition strategies.	**1-3. Establish program objectives and develop project strategy.** Telecon advice and consultation to support agency establishment of project objectives.
Identifies and assigns personnel to agency acquisition team. Establishes agency reviewers and decision makers. Distributes and communicates Super ESPC information to team. Coordinates maximum attendance at kickoff meeting.	**1-4. Acquisition team and other agency support organizations.** Provide materials and consulting for procurement and finance staff regarding benefits and risks of ESPC process; on-site briefing to secure commitment of acquisition team to project

Develops and distributes to agency acquisition team and FSN staff proposed project goals, objectives, and benefits for review and comment. Coordinates maximum attendance at kickoff meeting (below).	**1-5 Goals: Building agency / site understanding, support, and commitment.** Help establish project goals and objectives to aid in selling the project internally.
Identifies acquisition team members to attend workshop. Register for workshop and provide travel and per diem costs for workshop at DOE-selected site.	**1-7. Super ESPC Delivery Order Workshop.** One- or two-day training on developing an ESPC delivery order led by DOE contracting officers and FSN technical staff experience with Super ESPC implementation.

Phase 2: Project Development



2.1 Kickoff Meeting

The agency and ESCO meet and exchange information in a kickoff meeting in preparation for the ESCO's preliminary site survey. A kickoff meeting is recommended for clarifying expectations, establishing communications protocols, and developing a schedule from for agency and ESCO tasks through award of the delivery order. The agency should use the kickoff meeting to make sure that the ESCO has a clear understanding of the agency's priorities and general parameters for the project. Final decisions and complete agreement are not necessary or expected at this stage, but general guidelines can be established concerning which buildings or sites will be targeted, known problems that need to be fixed, potential energy-conservation measures (ECMs), measurement & verification (M&V) approach, payback ranges, project timelines, and length of the contract term. After the kickoff meeting, the ESCO begins the Preliminary Site Survey and the agency begins developing the delivery order request for proposal (DO RFP).

2.2 ESCO's Preliminary Site Survey

The ESCO conducts a Preliminary Site Survey to gather data for developing the initial proposal. The ESCO also uses the preliminary project plan and other information provided by the agency. The agency facilitates access to the site and buildings and provides utility billing data.

2.3 ESCO's Initial Proposal

The ESCO's initial proposal comprises the first formal approximation of the final shape of the project. The initial proposal is intended to give the agency enough information to make a confident decision on proceeding with the project, but is not expected to reflect a complete understanding of agency- and site-specific requirements, and is intended to be produced at modest cost to the ESCO. Any ESCO awarded an IDIQ contract under the Super ESPC program may identify a delivery order project and offer an initial proposal if approval is granted by the COR and the project is within the general scope of the IDIQ contract. The initial proposal must comply with the IDIQ contract (e.g., Section H.16 in Southeast IDIQ) and include a narrative summary of the proposed project, descriptions of the ECMs, estimates of proposed energy and cost savings, and estimated price.

Financial schedules H-1 through H-5 from the IDIQ contract (e.g., Section H.16 in the Southeast IDIQ) are required components of ESCO price proposals. The initial proposal contains delivery order schedules H-1 through H-4. The H schedules are briefly described in the boxed text on the following page and included in the *Guidelines* as Attachment 6.

2.4 Review of Initial Proposal

The agency will decide whether or not to proceed with the project based on its evaluation of whether the ESCO-identified project appears to be feasible and whether the proposal meets agency wants and needs to the extent that it is possible for a pay-from-savings project to do so while abiding by the requirements defined in the IDIQ. The agency formalizes its decision to proceed by transmitting a letter confirming its intention to award the delivery order to the ESCO (the Notice of Intent to Award). The agency also sends the DO RFP to the ESCO at this point.

Up until this point, the ESCO has carried the risk of investing in developing a project with no assurance of recovering any costs. Costs incurred after the Notice of Intent is issued may be directly recovered as part of the overall cost of the ESPC project in the delivery order implementation price, assuming an award is ultimately made.

2.5 Verification of Sufficient Ordering Capacity in IDIQ

The agency is required to provide an estimate of the maximum potential price of the delivery order to the DOE Procurement Contracting Officer (PCO) before the DO RFP for the delivery order may be issued. (The price estimate in the ESCO's initial proposal, perhaps with a safety factor, can be used for this purpose.) After verifying that sufficient ordering capacity remains to cover the proposed delivery order award, the DO PCO authorizes the agency to use the IDIQ, assigns a delivery order number, and logs the potential cancellation

ceiling for the order. The authorization requirement prevents agencies and contractors from expending resources on projects that would push cumulative orders against the IDIQ contracts over the dollar limit specified in the IDIQ.

Financial Schedules in Price Proposals — B Schedules and H Schedules

H-1 — Delivery Order Proposed Guaranteed Performance and Annual Contractor Payments
Schedule H-1 is included as the ESCO's initial proposal for cost savings, guaranteed cost savings, and contractor payments for each year of the performance period, estimated based on the Preliminary Site Survey. This schedule is essentially replaced in the revised/final proposal by schedule H-5.

H-2 — Delivery Order Implementation Price by ECM, Technology Category, and Delivery Order
H-2 details the costs of feasibility studies and designs and construction and applies an implementation markup not to exceed maximum values in schedule B.1 (see below) to derive the total implementation price for each ECM, each technology category, and for the overall delivery order.

H-3 — Delivery Order Contractor Cash Flow
Schedule H-3 presents the contractor's proposed cash flow for the implementation period, including amounts financed, debt service, and itemized performance period expenses. The markup applied to the performance period expenses may not exceed the maximum in schedule B-2. The interest rate used to finance the project investment may not exceed the current like-term T-bill rate plus the maximum premium in schedule B-3 (see below).

H-4 — Delivery Order Energy and Cost Savings by ECM, Technology Category, and Delivery Order
Schedule H-4 presents the ESCO's estimates of the energy and cost savings to be generated by the project. The information in schedule H-4 supports the proposed guaranteed annual cost savings given in schedule H-1 of the initial proposal or schedule H-5 of the revised/final proposal.

H-5 — Delivery Order Guaranteed Savings, Price, and Cancellation Ceiling
Schedule H-5 is the bottom line, to be included in the revised/final proposal. Schedule H-5 presents the ESCO's final guarantee of annual cost savings, revised and fixed contractor payments, and the cancellation ceiling for each year of the performance period. H-5 is based on new information discovered since the initial proposal, including the results from the ESCO's Detailed Energy Survey and agency/site-specific requirements in the DO RFP.

Schedules B-1 and B-2 identify maximum markups the ESCOs may add to implementation and performance period expenses to derive total prices. **Schedule B-3** identifies the maximum interest rate premiums over like-term T-bills that can be charged for project financing. These schedules, included in Section B of the IDIQ and explained in H.12, were negotiated individually for each ESCO and are included in each ESCO's prime contract. The maximums in the schedules are applicable to all delivery orders against the Super ESPCs, unless revised by DOE through modification to the ESCO's IDIQ contract.

Agencies are encouraged to negotiate markups and interest rates lower than the maximums identified in the B schedules, but the markups embedded in the H schedules cannot exceed those in the B schedules.

2.6 Delivery Order Selection Document (DOSD)

A Delivery Order Selection Document (DOSD), prepared and signed by the cognizant agency contracting officer and sent to the DOE PCO, is required to verify that selection of the ESCO was conducted in compliance with the rules regarding competition in government procurements that are applicable to Super ESPC contracts. (See Attachment 7 for the required content and format for the DOSD.)

To encourage ESCOs to apply their project development expertise to initiate projects with federal agencies, the Energy Policy Act of 1992 allows unsolicited proposals to be accepted and awarded to the initiator after a notice is placed in the *Commerce Business Daily*. DOE has fulfilled the requirement for a *Commerce Business Daily* notice by placing one during the process of selecting the IDIQ prime contractors. Holders of the IDIQ contracts can identify and propose projects and be awarded those projects single-source under an exemption from competition built into the IDIQs for that purpose.

When completing the DOSD, the cognizant CO cites the exemption for ESCO-identified projects and describes briefly the informal communications process the site used to choose an ESCO partner. The CO's signature verifies that the evaluation of the proposal and the best-value decision or justification for using the exemption from competition were conducted fairly and in accordance with applicable regulations and the IDIQ contract.

2.7 Transmittal of DO RFP and Notice of Intent to Award

The agency CO sends the ESCO official notification of its conditional selection in the form of a "Notice of Intent to Award" the delivery order, along with the DO RFP. (Attachment 8 is a sample of a notice-of-intent-to-award letter.) The letter specifies a time frame within which the selected ESCO must conduct the Detailed Energy Survey of facilities and energy systems at the project site. From this point forward, the agency owns all the products of the ESCO's work (if a final delivery order is awarded), and the ESCO's costs for its work are recoverable in the delivery order implementation price.

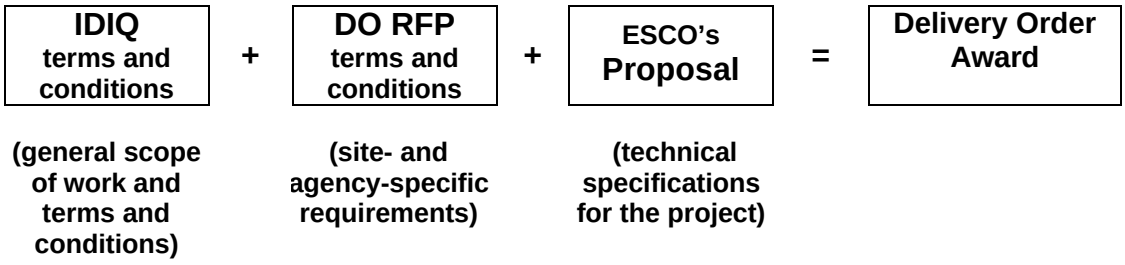
2.8 Development of the Delivery Order RFP

Developing the DO RFP is probably the largest single task the agency will undertake in developing the project. Although the DO RFP is not issued until after the ESCO's initial proposal is accepted, its development can begin at the same time the ESCO is conducting the preliminary site survey. The DO RFP should be ready to be finalized and delivered to the ESCO as soon as possible after evaluation of the ESCO's initial proposal. Preventing delays and ensuring that the project moves forward as efficiently as possible saves money for the agency and the ESCO.

Function of the DO RFP

The Super ESPC IDIQ contracts are intended to be flexible and to accommodate the particular requirements of the ordering agencies. Agencies are expected to use the DO RFP to tailor the IDIQ contract to their needs and circumstances by incorporating into the delivery order all agency-, site-, and project-specific standards, procedures, functional requirements,

terms, and conditions, and to communicate these requirements to the ESCO. The role of the DO RFP in the final delivery order is portrayed schematically below.



About 50 clauses in the IDIQ can be supplemented to specify site-specific requirements, such as those addressing how operations and maintenance (O&M) is to be handled; special environmental, safety, and health requirements; compatibility requirements for design drawings; and others. It is imperative that agency staff developing the DO RFP communicate with their site support organizations to accurately identify their requirements and to ensure that the wording in the DO RFP addresses those requirements. Organizations that typically have input to the DO RFP include the following.

- Utilities or public works
- Building engineer
- Labor relations
- Accounting
- Maintenance
- Legal
- Facility management
- Design/construction engineering
- Environmental waste & management
- Health & safety

Prescriptive Format for Delivery Order RFPs

A prescriptive format, or template, for the DO RFP is provided for use by ordering agencies and contractors. The template is provided as Attachment 9 and is available in electronic format on FEMP's website at http://www.eren.doe.gov/femp/. The prescriptive format is intended to minimize the government's cost of DO RFP development.

The template for the DO RFP identifies all the IDIQ clauses that permit or require additions or amendments to specify agency-, site-, or project-specific requirements. The template lists the clauses by number, in the order in which they appear in the contract. Using the template as a guide to developing the DO RFP precludes the need to review the entire IDIQ contract in order to determine what should be addressed in the DO RFP.

Using the Prescriptive Format

The following are examples of how the DO RFP template is used to address agency requirements for as-built drawings and environmental protection. The examples first show the language as it appears in the DO RFP template, giving guidance for adding specifications where required or allowed. Next the IDIQ contract language is shown. Finally the clause is shown as amended by the agency in their site-specific DO RFP.

Example 1: As-Built Drawings

DO RFP Template Language

C.5.6 As-Built Drawings
The contract indicates that as-built drawings shall be submitted in accordance with agency standards or specifications identified in the delivery order. Specify these standards and/or specifications, and if there is a time period to be specified for Government review, also specify it here.

IDIQ Contract Language

C.5.6 As-Built Drawings
After completion of installation and Government acceptance of installed ECMs, the Contractor shall submit as-built drawings to the Contracting Officer or its designated representative in accordance with agency standards or specifications identified in the delivery order.

Agency Delivery Order RFP Language

C.5.6 As-Built Drawings
NOTE: The requirements specified herein supercede those in Section C.5.6 of the IDIQ contract. The Contractor shall maintain and submit as-built drawings to the Contracting Officer or its designated representative per the requirements in Technical Specification Division 1, General Requirements, Sections 01010, General Work Requirements, and 01045, Design Build Requirements. Technical Specification Division 1 is provided as an attachment.

Example 2: Environmental Protection

DO RFP Template Language

C.5.4 Environmental Protection
Specify any known potential environmental impacts relative to the specific site or agency and/or the proposed project ECMs. (This could include information on indoor air and water quality; fragile ecosystems or endangered species; the need to use low-emission paints and solvents; preference(s) for recycling or historical preservation considerations; etc.) In addition, specify any site- or agency-specific waste handling and storage requirements.

IDIQ Contract Language

C.5.4 Environmental Protection
ECMs shall cause no adverse impacts upon the quality of the human environment. Impacts on air quality (pollutants, noise level, and odors or fumes) and potable water use are examples of various areas of concern at the project site. Any planned building modifications shall comply with the National Environmental Policy Act (NEPA) and other applicable Federal, state, and local environmental protection regulations. Refer to paragraph H.24 titled Environmental Protection. The delivery order will identify specific known hazardous waste handling and storage requirements (e.g., PCB ballasts removed from lighting fixture retrofits).

Agency Delivery Order RFP Language

C.5.4 Environmental Protection
NOTE: The requirements specified herein are in addition to those in Section C.5.4 of the IDIQ contract.

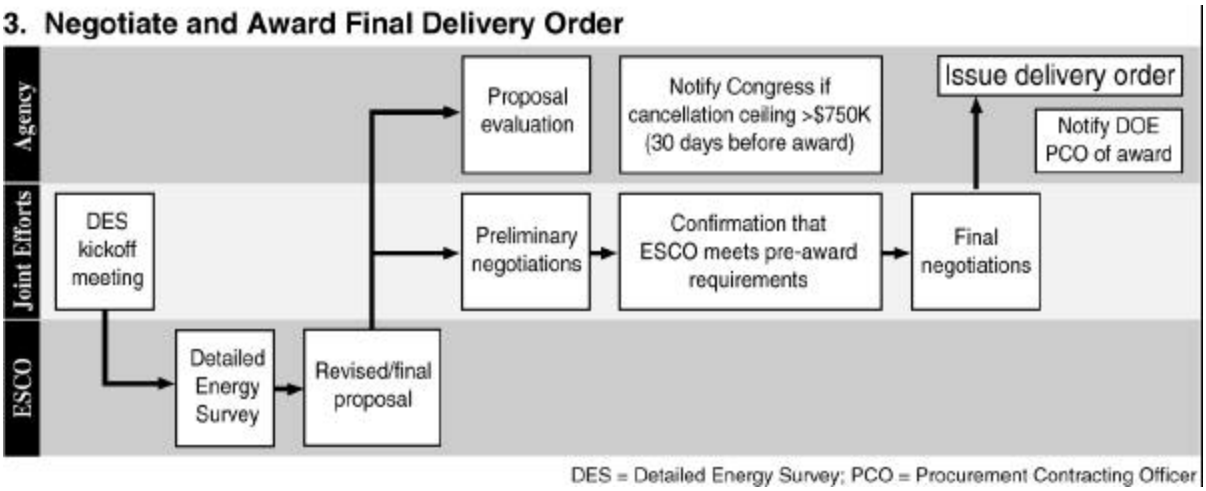
Authorized Government officials may inspect any of the subcontractor's work areas on a no-notice basis during normal work hours. In the event that a regulatory agency assesses a monetary fine against the Government for violations caused by the contractor or any of his sub-tier subcontractors, the contractor shall reimburse the Government for fines and costs associated with this violation. Additional site-specific requirements are documented in Technical Specification Division 1, General Requirements, Section 01550, Waste Management and Environmental Compliance. Technical Specification Division is provided as an attachment.

Summary of Phase 2 FSN Services and Agency Tasks

Agency Responsibilities	FSN Basic Services	FSN Optional Services
Agency coordinates and hosts meeting with ESCO and FSN reps. Coordinates maximum attendance of acquisition team, affected facility/ building managers, site/regional/HQ reviewers and decision makers, FSN RO and project facilitator, and ESCO project team.	**1-6. Kickoff meeting support** FSN facilitates kickoff meeting with agency and ESCO to establish relationships and communications protocols.	
Agency staff drafts DO RFP and provides copies to FSN staff for review and comment.	**1-8. DO RFP Development** FSN provides DO RFP format and telecon consultation to support RFP development, and performs technical review of draft RFP.	1-8A. DO RFP development—on-site consultation 1-8B. Direct support
Agency CO or representative provides copies of DO RFP to DOE CO and COR for final review.	**1-9. DOE CO/COR reviews DO RFP** and provides comments/recommendations.	
Agency provides FSN staff copies of initial ESCO proposal; ensures that appropriate acquisition team members review proposal and generate agency/site-specific questions or issues prior to scheduled telecons with FSN staff.	**1-10. Initial Proposal Review** FSN reviews initial proposal for compliance with requirements and for content of critical elements, such as preliminary M&V plan; prepares comments for agency to submit to ESCO.	
Agency prepares selection decision documentation and intent-to-award letter.	**1-11. Intent-to-Award Letter Support.** FSN advises agency on how to complete the delivery order selection document and assists with drafting intent-to-award letter to ESCO.	

Phase 3. Negotiate and Award the Final Delivery Order

The ESCO's revised/final proposal is the basis for negotiating the final terms and conditions of the delivery order. The final proposal provides the technical description of the project including detailed ECM descriptions, M&V plan, etc., as well as the price proposal including H schedules as per the IDIQ contract proposal content requirements (Section H.14 in Southeast). Final and binding selection of the contractor as awardee is conditional upon conformance of the final proposal to all requirements defined in the IDIQ (as modified by the DO RFP) and upon successful negotiation to final agreement on the terms of the DO and content of the revised/final proposal. The agency will also verify that the ESCO meets several other pre-award requirements defined in the IDIQ contract before the DO is signed.



3.1 DES Kickoff Meeting

The ESCO generally sends a team of engineers led by a senior project developer to perform the Detailed Energy Survey (DES). The agency generally provides an escort and/or arranges for access to the various buildings to be surveyed. The DES kickoff meeting is useful for introducing new staff on both sides, reviewing access procedures and security requirements, clarifying as necessary the agency/site-specific requirements in the DO RFP, transferring documents, establishing communications protocols, and revisiting the overall delivery order schedule. At a minimum the kickoff meeting should ensure that the agency and ESCO agree on the schedule going forward, the buildings included in the scope, the general O&M approach, and the general M&V approach. FSN will facilitate the kickoff meeting, helping to establish roles, responsibilities, timelines, and communications protocols, as well as a plan for coordinating the process of reviewing the revised/final proposal.

3.2 The Detailed Energy Survey

The DES is the ESCO's investment-grade audit of facilities and energy systems at the project site. The DES augments, refines, and updates the preliminary site survey data and provides the information needed to update the feasibility analyses of the various ECMs under consideration for the project, whether they were included in the initial proposal or proposed as a result of information discovered during the DES. Information discovered by means of the DES is also used to verify the accuracy of the estimated annual cost savings (or adjust the estimate) and confirm the contractor's ability to structure a project with an acceptable term where guaranteed annual cost savings cover the firm fixed-price contractor payments. The DES is the basis for the revised technical and price proposals.

3.3 The Revised/Final Proposal

The ESCO produces the revised/final proposal by integrating their findings from the DES with the requirements stated in the IDIQ and DO RFP. A detailed DES report is usually submitted with the revised/final proposal that reviews ECMs considered, their feasibility, rationale for selecting the ECMs included in the project, costs to implement each ECM with detailed backup information, and annual cost savings of each ECM with detailed supporting

data. The revised/final proposal content is specified in the IDIQ contract (e.g., H.14 in the Southeast). Negotiations to achieve agreement on a final delivery order are based on the final/revised proposal and any other post-DES submittals such as the DE report.

The revised/final price proposal includes completed schedules H-2, H-3, H-4, and H-5, as required by the IDIQ. The H and B schedules are described after Step 2.3.

3.4 Agency Review of Revised/Final Proposal

The agency's careful review of the DES report and final proposal is critical in preparing for negotiating the final delivery order and, as in any contract obligation, ensuring that the agreement is a good business deal for the agency. The factors that are the basis of the financial value of the contract to the agency in the years to come — guaranteed annual cost savings, an M&V methodology to verify that the savings are being delivered, and firm fixed price contractor payments — are established in the revised/final proposal and supported with detailed backup in the DES report, so thorough and systematic review before accepting the offer is imperative.

The agency should look carefully at the proposed M&V plan and baselines in energy use and facility conditions against which energy and energy-related O&M cost savings will be measured. A double check to ensure that price schedules are consistent with DES report results is highly recommended.

Review of the proposal will address one pre-award qualification specified in the IDIQ. Unless otherwise specified in the DO RFP, the guaranteed annual cost savings in the final proposal (schedule H-5) must be within 10% of the guaranteed annual cost savings stated in schedule H-1 in the initial proposal. If not, the ESCO must provide an acceptable rationale for the discrepancy or the proposal will be rejected. (See Step 3.6 for more information on this requirement.)

3.5 Negotiation of Final Delivery Order

Negotiations to a final delivery order award have both informal and formal aspects. Informal negotiations are ongoing, beginning with the first kickoff meeting and continuing throughout the development of the final proposal, as the ESCO and agency discuss the project details and the agency's needs and preferences. Most of the issues regarding technical matters, such as ECMs, equipment, and selection of subcontractors, are generally settled in these informal, ongoing communications. In negotiations led by the cognizant CO, the agency and ESCO arrive at agreement over any remaining technical and price issues.

In many cases, by the time the agency contracting officer and ESCO sit down for formal, final negotiations, all parties are confident that no significant unresolved differences remain and that they are ready to sign the delivery order. Final negotiations result in agreement on all aspects of the offer including price. After negotiations are finished, the agency drafts a memo outlining the proceedings and results of the negotiations for review by the DOE PCO before he or she grants approval for the delivery order to be signed.

3.6 Confirmation that Pre-Award Requirements Are Met by ESCO

The IDIQ defines several requirements that must be met by the ESCO before the delivery order may be awarded. Completing the DES, revising the ECM feasibility analyses, delivering the revised/final proposal, and negotiating to a final accepted delivery order proposal are among these requirements. The ESCO must also provide evidence that financing and bonding for the project are committed.

Another requirement is that the cost savings guaranteed in the revised/final proposal (in Schedule H-5) must total at least 90% of the savings guaranteed in the initial proposal (in Schedule H-1). This requirement can be modified in the DO RFP (e.g., to within 20%). Also, the ESCO can satisfy the requirement by providing an acceptable rationale as to why the difference between the savings guaranteed in the initial and final proposals exceeds the specified value.

3.7 Notification of Congress of Cancellation Ceiling if over $750,000

At least 30 days before the award of a delivery order, the agency is required to notify Congress of an impending DO award if the first-year cancellation ceiling in schedule H-5 is over $750,000. A sample notification is provided in Attachment 10. The advance notice gives Congress an interval in which to respond or comment if it so chooses, but no official response or explicit approval is needed before the delivery order may be awarded thirty days after notification of Congress.

3.8 Award of Delivery Order

The cognizant agency CO signs and awards the delivery order. The delivery order award physically consists of (1) a face page containing price, scheduled completion date, accounting data, and signatures, (2) the delivery order RFP, and (3) the ESCO's revised final proposal. The IDIQ contract is included by reference. The contract as modified by the RFP may also require inclusion of other post-DES submittals (e.g., a DES report).

3.9 Notification of DOE PCO

The agency notifies the DOE PCO of the award and provides copies of the delivery order transmittal.

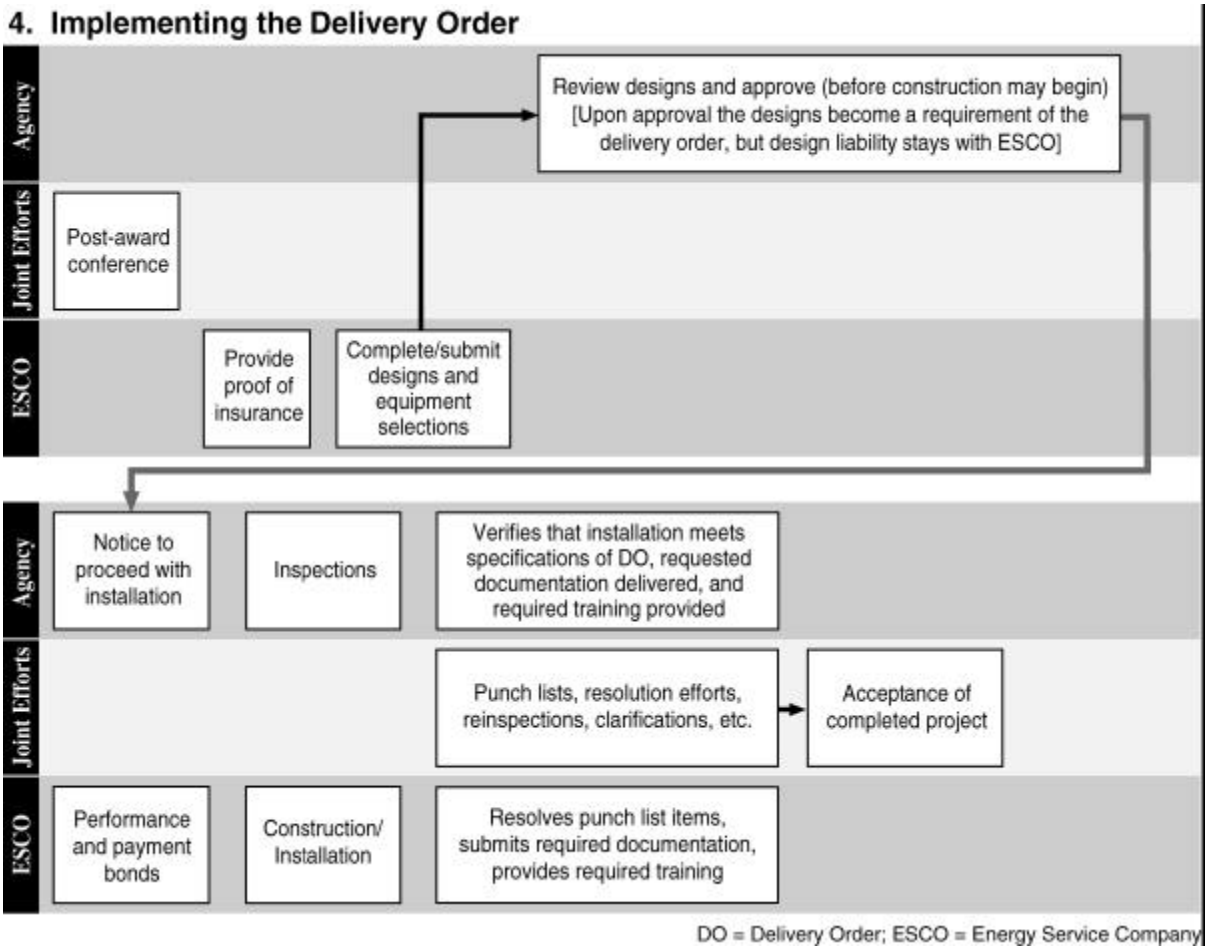
Summary of Phase 3 FNS Services and Agency Tasks

Agency Responsibilities	FSN Basic Services	FSN Optional Services
Agency coordinates the scheduling of the meeting with the ESCO and FSN and arranges for meeting space at the project site.	**2-1. Detailed Energy Survey (DES) Kickoff meeting support.** FSN facilitates kickoff meeting with agency and ESCO to establish roles, responsibilities, expectations, timelines, and communications protocols.	
Agency provides copies of DES to FSN staff and ensures that appropriate acquisition team members review DES and generate agency-/site-specific questions or issues prior to scheduled telecons with FSN staff.	**2-2. Project technical & financial analysis.** FSN reviews the DES Report and preliminary drafts and assists the agency in achieving agreement with the ESCO on feasible ECMs, and establishing facility baseline conditions and a site-specific M&V plan.	2-2A. Direct support. On-site technical resources to review DES report with special emphasis on the baseline energy use and performance.
Agency provides copies of revised/final proposal to FSN and ensures that appropriate acquisition team members review DES and generate agency-/site-specific questions or issues prior to scheduled telecons with FSN staff.	**2-3. Revised/final proposal review — consultations**. FSN reviews final proposal against format and evaluation requirements cited in the IDIQ and DO RFP.	2-3A. Direct support. FSN provides technical resources for proposal review, to include assessment of ESPC-unique data, such as markups, performance period expenses, and financing interest rates. FSN assures that price schedules are correct and evaluates ESCO's selections of equipment. Coordinates and assembles agency and FSN questions and issues for agency CO to be presented to ESCO.
Agency provides copies of technical and price proposals to FSN staff for review and coordinates telecons with agency CO and FSN staff to discuss and review negotiation strategy recommendations.	**2-4. Assist agency with technical and price negotiations up to delivery order award** — consultations. Assists with development of technical and price negotiation approach and strategy. Participates in negotiations, assesses opportunities and options. Develops best alternatives for negotiations.	
Agency provides copies of proposed delivery order to FSN staff for review.	**2-5. DOE CO/COR review of delivery order for compliance with the IDIQ contract.**	
The delivery order is signed and awarded by the cognizant agency CO. Agency CO and technical staff provide administration of delivery order.	**2-6. Award delivery order.** DOE CO updates DO log to reflect actual award so that the tracking of remaining ordering capacity is accurate.	

Phase 4. Implementing the Delivery Order

The implementation period has two distinct aspects: (1) the ESCO's submittals of designs, equipment specifications, and installation plans, and agency review and approval of the submittals; and (2) installation and/or construction of the project. The final designs for the project are completed after the delivery order is awarded. The ESCO's submittals of its designs and plans become requirements of the contract after they are accepted by the agency, so careful review is imperative. However, liabilities associated with defects in design or materials remain with the ESCO.

Construction begins after acceptance of the ESCO's submittals. The agency's role during this stage of the project is to perform planned inspections as construction/installation reaches milestones to verify the progress and to ensure that the ECMs are installed per delivery order specifications. Agency inspections are not to be confused with code official inspections, which are arranged by the ESCO.



4.1 Post-Award Conference

A post-award conference is recommended to lay the foundation for a strong working relationship between the ESCO and the government during implementation of the project. The objectives of the post-award conference are similar to those of earlier kickoff meetings — to establish roles, responsibilities, expectations, timelines, and communications protocols. At this stage the ESCO and the agency will also review details pertinent to the ECM installation, post-installation inspections, commissioning, training, acceptance, operations, maintenance, and other aspects of contract performance, and establish protocols for site access and the submittal review process.

4.2 Proof of Insurance

The contractor submits proof of insurance within 15 days after DO award, after which the cognizant CO issues a notice to proceed with design and the ESCO begins the work specified in the delivery order.

4.3 Submittal and Approval of ESCO's Designs and Equipment Selections

Details of the ESCO's designs, plans, and schedules must be approved before construction may begin. The processes for submittal and review of the ESCO's designs and equipment selections and orders are defined in the ESCO's proposal, per requirements for proposal contents in Section H.14 of the IDIQ contract, as supplemented by the DO RFP. The ESCO's submittals constitute requirements of the contract after approval by the agency, per IDIQ contract Section C.5.1. Designs, equipment, and installation plans must conform to the standards given in Sections C.5.1 and C.5.2.

4.4 Submittal and Approval of ESCO's Installation Plan

The ESCO will submit installation and commissioning plans for all ECMs within the time frame specified in the proposal. The purpose of the installation plan is to provide detailed information to allow the agency's Site Technical Representative to confirm that the ECMs will be installed in a manner that complies with contract requirements. The ECMs must be as described in the proposal and must meet the design and construction standards in the contract. The installation plan also provides information the agency will use to schedule and conduct inspections of ECM installation.

4.5 Payment and Performance Bonds and Notice to Proceed with Installation

Installation may commence after the ESCO's installation plans are approved by the agency and the CO has received acceptable performance and payment bonds and the required insurance certificates. Once all of these requirements are met, the cognizant CO will transmit to the ESCO a notice to proceed with ECM installation.

4.6 Day-to-Day Monitoring of ESCO Performance

The Site Technical Representative performs day-to-day monitoring of delivery order implementation and is responsible for developing a surveillance plan that outlines the

reporting tools and observation methods to be used to track and measure contractor performance. No particular format is required, but the plan should list the subjective and objective measures that will be used to assure timeliness and quality and to prevent cost overruns.

4.7 Installation

Before and during ECM installation, the ESCO will provide the agency with required documents concerning installation procedures, such as a quality control plan, notification of work outside regular hours, planned utility outages, and ECM testing. The agency is responsible for monitoring the ESCO's progress during ECM installation to ensure that the work is proceeding as planned.

4.8 Inspections and Verifications

The agency must conduct inspections or otherwise verify (1) that the specified equipment was installed — and was installed properly; (2) that facility and energy baselines have been accurately defined; (3) that the ECMs as installed have the potential to generate the guaranteed savings (using commissioning, test and balance, and/or M&V data for confirmation); and (4) that the ESCO has submitted all required documentation, such as as-built drawings, a spare parts list, an O&M Plan, and training materials and schedules.

4.9 Acceptance of Completed Project Installation

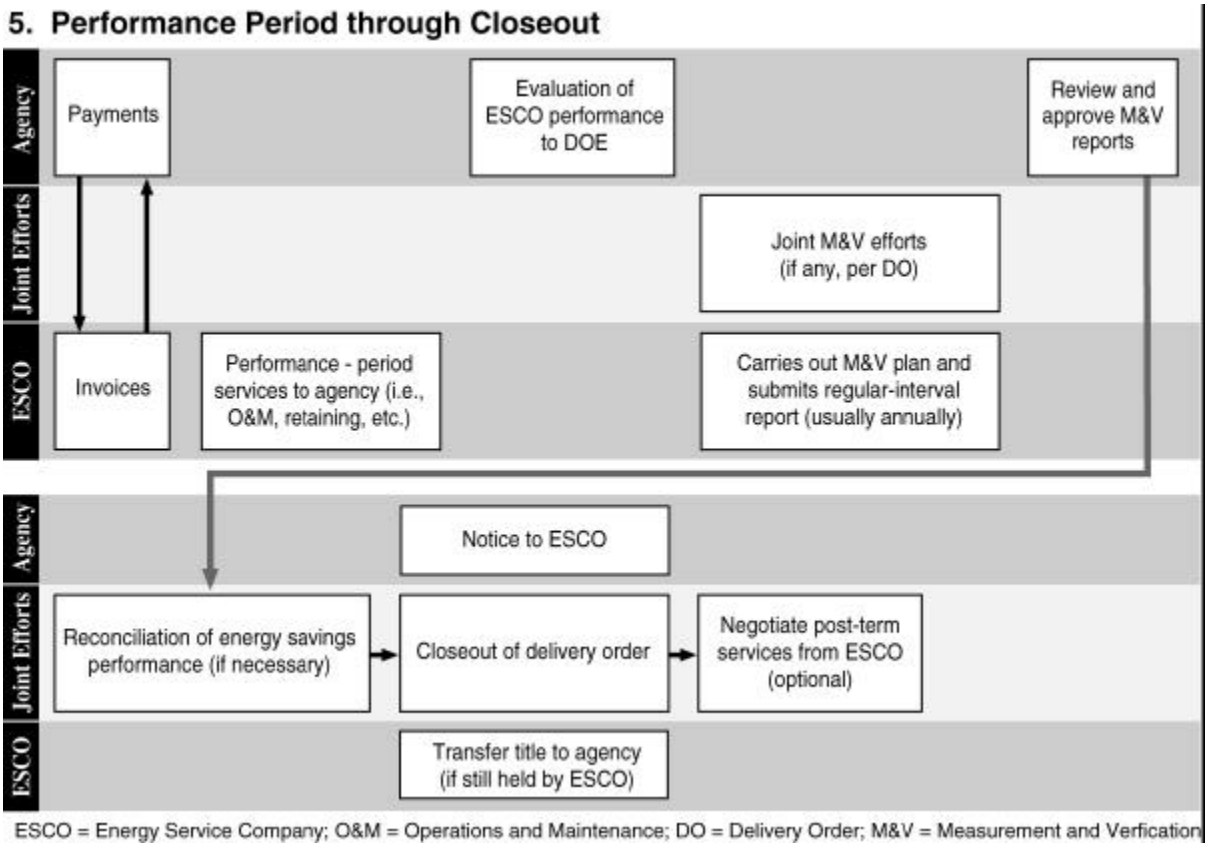
After confirming that installation has been accomplished as required, that ECMs have the potential to generate the guaranteed cost savings, that required post-construction submittals are in hand, and that required training has been delivered, the agency Site Technical Representative (STR) and CO indicate the agency's acceptance of the installed project via a letter to the ESCO.

The agency STR is responsible for inspecting ECMs, developing punch lists, and reinspecting to verify resolution so that the ECMs can be accepted. The STR is also responsible for reviewing, commenting on, and demanding revision of post-construction documentation until it meets contract requirements and can be accepted. The ESCOs are generally highly motivated to resolve issues and achieve acceptance that all requirements of the contract have been met so that payments can begin.

Summary of Phase 4 FSN Services and Agency Tasks

Agency Responsibilities	FSN Basic Services	FSN Optional Services
Agency coordinates and hosts meeting with ESCO and FSN representatives to achieve maximum attendance of acquisition team, FSN RO staff and Project Facilitator, and ESCO team.	**3-1. Kickoff meeting support.** FSN facilitates the Post-Award kickoff meeting between the agency and ESCO.	
Agency reviews all contractor submittals and generates comments, questions, and issues for FSN consultation and advice. Provides copies of submittals and agency comments and questions. Coordinates telecons with FSN and agency acquisition team. Submits agency recommendations for ESCO action.	**3-2. Installation plan review — consultation support.** FSN provides support for a technical review of installation plans, submittals, shop and working drawings, manufacturers' data, planned service interruptions, permit acquisition plan and installation schedules for compliance, feasibility, consistency, and reasonableness. Telecon advice / written comments/recommendations	**3-2A. Installation plan review — direct support.** FSN provides direct on-site technical resources to provide technical review of installation plans and submittals.
Agency observes ESCO activity required per DO installation acceptance plan. Agency reviews any ESCO-submitted post-installation / project acceptance reports and generates comments, questions, or issues for FSN technical advice, and provides copies to FSN staff.	**3-3. Compliance with inspection and acceptance plan.** Consultation support to assist in the inspection and acceptance of the installed ECMs.	**3-3A. Compliance with inspection and acceptance plan — direct support.** On-site technical resources to inspect and accept the installed ECMs. FSN assists agency with development and monitoring of punch list items through completion and acceptance.
Agency inspects and/or observes post-installation system and equipment tests pursuant to DO M&V requirements and ESCO-produced post-installation M&V report. Reviews M&V report and generates comments, questions, or issues for FSN technical advice, and provides copies of questions and subject reports and submittals to FSN staff.	**3-4. Post-installation M&V report review.** Consultation and technical review of ESCO M&V report following installation and acceptance testing of all ECMs for compliance with the M&V plan.	
	FSN Optional Services—Installation Commissioning	
	• Project construction installation commissioning — consultation. Telecon consultation to assist agency in QA verification, including monitor/inspect installation and start-up activities.	
	• Project construction installation commissioning — direct support. Provide direct technical resources necessary to perform QA verification for compliance w/installation plans. May include FSN acting as the commissioning agent and providing commissioning services consistent with the DOE/GSA commissioning guide.	

Phase 5. Performance Period Through Closeout



5.1 Invoices and Payments

After the cognizant CO provides written notification to the ESCO that the installation complies with the terms of the contract and has been accepted, the ESCO may submit invoices to the agency. Invoices and payments generally occur monthly. The agency is responsible for verifying that the monthly invoices contain any required M&V documentation before issuing payment.

5.2 Performance Period Services from Contractor and Agency Review

The ESCO provides the services specified in the delivery order during the term of the contract. These services may include O&M services, periodic retraining of agency O&M staff, M&V services, and others. The agency verifies that the ESCO is delivering the negotiated services.

5.3 ESCO Performance Evaluation for DOE

The agency develops and carries out a surveillance and evaluation program to monitor the ESCO's performance and to contribute to DOE's efforts to measure the effectiveness of the Super ESPC contractors. The agency completes evaluations after ECM installation, annually, and at contract termination. Evaluation activities such as spot checks, as well as the ESCO's

monthly status reports, will provide information to the evaluation. Surveillance results and data are provided to the contractors for their comment and then entered into the DOE Past Performance Database. Agencies that wish to participate in the Super ESPC program may view these records to support their ESCO selection decisions.

ESCOs are also allowed access to the database and have the right to review and comment on all of their past performance evaluation reports for delivery orders issued under the contract. The ESCO's comments are included as part of the database for review by agencies.

5.4 Measurement and Verification (M&V)

To verify and document that the guaranteed savings are being delivered, the ESCO (or other responsible party per the delivery order) carries out the M&V plan. The M&V plan establishes the intervals at which specified measurements and monitoring will occur and the documentation required for periodic performance verifications. This documentation, referred to in the *FEMP M&V Guideline* as the "regular interval report," generally verifies continued operation of the installed ECMs and associated energy savings, demonstrates proper maintenance, and provides M&V results. The documentation is used to verify that the ESCO has delivered the guaranteed level of cost savings over the year.

5.5 Review and Approval of ESCO M&V Reports

The agency is responsible for reviewing and approving the ESCO's regular interval reports. It is recommended that the agency independently gather information for evaluating the reports by conducting spot checks of ECMs to identify potential deficiencies in performance or energy savings.

5.6 Reconciliation of Energy Savings Performance

If the actual savings are less than the guaranteed savings, the ESCO must reimburse the government for any overpayment. Reconciliation of savings generally occurs annually. The exact formula for reconciliation is specified in the IDIQ contract (as modified by the DO RFP). The process for resolving disputes is also specified in the IDIQ (as modified by the DO RFP).

5.7 End of Contract Term and Closeout of Delivery Order

At the end of the contract term, the agency notifies the ESCO by letter that the performance period is over and payments will cease.

Title Transfer. Title of the equipment and systems built or installed under the delivery order may be transferred from the ESCO to the agency at the time of delivery order award, installation, or contract closeout. During the contract term, the title may be held by the agency or the ESCO, depending on which option is most advantageous to the economics of the project. Taxation, agency policies regarding real property holdings, or other factors may influence the decision.

Summary of Phase 4 FSN Services and Agency Tasks

Agency Responsibilities	FSN Basic Services
Provides copies of first annual M&V report to FSN staff. Reviews annual M&V report and generates comments, questions, or issues for FSN technical advice. Coordinates FSN and acquisition team telecons Submits agency recommendations to ESCO for action.	**4-1. Annual energy audit technical assistance.** As required by the IDIQ contract, FSN provides assistance with review of first annual M&V report.
	FSN Optional Services
	4-1A. Provide or assist with data acquisition. FSN will provide assistance with M&V data collection. Activities may include measuring performance parameters in support of the M&V plan and/or review of M&V activities and services performed by others.
	4-1B. Provide or assist with data reduction and analysis. FSN provides assistance with M&V data analysis. Activities may include calculations, simulations, and/or review of M&V activities and services performed by others.
	4-1C. Assist in negotiation of baseline adjustments. FSN assists with the development of strategies for making baseline adjustments. Provides technical advice to account for changes in operations, etc., affecting baselines over time and assists agency with negotiations with vendor for baseline adjustment.

4.2 IDIQ CONTRACT SECTIONS DEFINING PROPOSAL CONTENTS AND AWARD PROCEDURES

H.12 - Delivery Order Request For Proposal And Delivery Order Formats
- Prescriptive formats for RFPs and delivery orders
- Contents of delivery orders
- B schedules

H.13 - Procedures for Awarding Delivery Orders
- Competitive awards comply with “fair opportunity to be considered” rules
- No protest under 48 CFR (FAR) Part 33 is authorized
- Exceptions for ESCO-identified projects

H.14 Requirements for Proposal Contents for Government-Identified Delivery Orders
- Also applies to revised/final proposals in ESCO-identified projects
- Formats for technical and price proposals
- H-schedules for price proposals

H.15 Proposal Evaluation for Government-Identified Delivery Orders
- Maximum default evaluation criteria, matched to content requirements in H.14
- Not relevant to ESCO-identified projects

H.16 - Requirements for Initial Proposal Contents for Contractor-Identified Delivery Orders
- Less extensive content required than for H.14 proposals so that ESCOs can develop initial proposals at modest expense
- Final proposals for ESCO-identified projects to comply with H.14

H.17 - Evaluation of Initial Proposals for Contractor-Identified Delivery Orders
- Procedures for ESCO-identified projects

H.18 Pre-award Requirements
- Pre-award requirements defined

4.3 REQUIRED DOCUMENTS

The following are lists of required documents to be produced by agencies and ESCOs, respectively.

DOCUMENTS REQUIRED FROM AGENCIES

Document	Signature	When and Recipients
Memorandum of Understanding	DOE & Agency	DOE COR
Interagency Agreement	DOE & Agency	DOE COR
Delivery Order Selection Document	Agency	After selection of ESCO ; Review by DOE; Agency file
Notice of Intent to Award	Agency	ESCO
Request for Proposal	Agency	Review by DOE; ESCO
Negotiation Memo	Agency	Review by DOE; Agency file
Notification to Congress	Agency	Through Agency chain to Congress
Delivery Order Award Document	Agency	Review by DOE; ESCO w/copy to DOE CO
Acceptance letter	Agency	When ECMs are complete and accepted to ESCO w/copy to DOE CO
Performance Evaluation Report	Agency	Annually to DOE CO
Savings Verification Memo	Agency	Annually to file; w/copy to DOE CO
Closeout documents	Agency	At end of contract period to ESCO; Agency file; w/copy to DOE CO

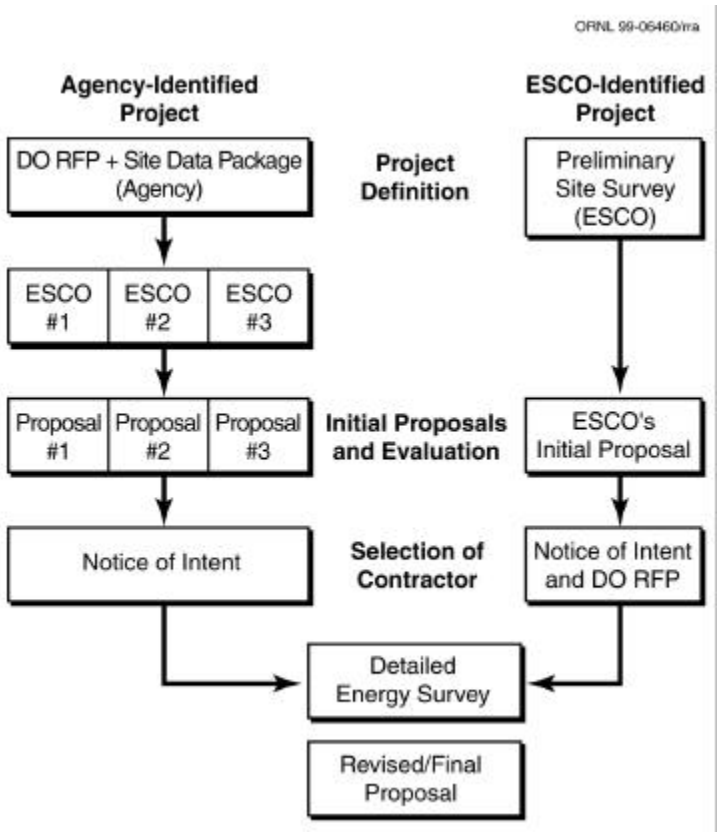
DOCUMENTS REQUIRED FROM ESCOs

Document	When	Recipient
Request to contact agency	Before Initial Proposal	Orally to DOE COR
Initial Proposal	After Initial Site Survey	Agency CO and COR
Detail Energy Survey Report	With Final Proposal	Agency CO and COR
Final Proposal	In response to RFP	Agency CO and COR
Evidence of Bonds, Financing and Insurance	Before Award	Agency CO
Signature on Award Doc.	At Award	Agency CO
Certification of Insurance	Before work commences	Agency CO
Payment Bonds	30 days after award or acceptance of ECM installation plans	Agency CO
Evidence of permits and licenses	As applicable, before work begins	Agency CO
Design Review Packages	As required by Agency	Agency COR
Construction Packages (Implementation Plan)	After Certified for Construction by Agency	Agency COR
Acceptance Report	Post Construction /Pre Acceptance	Agency CO and COR
Annual M&V Report	Annually	Agency CO and COR

4.4 AGENCY-IDENTIFIED PROJECTS

The preceding overview of the Super ESPC process describes ESCO-identified, single-source projects, which have been shown to be preferred over agency-identified projects by most participants in the Super ESPC program. However, agencies may choose to identify their own projects, solicit competitive proposals, and review several ESCOs' technical and pricing approaches before selecting an ESCO.

This section discusses the distinguishing features of agency-identified projects, the procedural differences between agency-identified and ESCO- identified projects, and some of their cost implications for agencies and ESCOs. The most significant difference is implied in the terminology — the agency, rather than the ESCO, defines or "identifies" the technical scope and specifications of the project. The second major difference is the competitive procurement process required for agency-identified projects, unless one of the exemptions to competition in the IDIQ contract applies. The two paths are illustrated in the comparative flowchart at right. The two processes are identical after selection of the contractor and transmittal of the notice of intent to award the delivery order.



Agency-identified projects require significantly more work on the part of the agency and more technical assistance from FSN than ESCO-identified projects. This is reflected in the prices for FSN's basic service packages — $30,000 for ESCO-identified projects vs. $50,000 for agency-identified projects (see Sect. 3.6).

4.4.1 The Competitive Procurement Process

The Super ESPC prime contracts were awarded under the Federal Acquisition Streamlining Act (FASA), which requires that the national prime contractors be given a "fair opportunity to be considered" for delivery order awards, except in rare instances when one of four standard exemptions from competition apply:

1. Competition is precluded by the urgency of the requirement.
2. The requirement is for installation, operation and maintenance of ECMs that are highly specialized and only one contractor can provide the ECMs at the level of quality required.
3. It is necessary to place a delivery order to satisfy a minimum guarantee.
4. The requirement is a logical follow-on to a delivery order previously issued to a contractor on a competitive basis.

A fifth exemption from competition for ESCO-identified projects is included in the Super ESPC contracts to incorporate the intent of the ESPC legislation (42 USC 8287) to encourage ESCOs to initiate projects with federal agencies. With rare exceptions agency-identified projects must be open to competition, and a "fair opportunity" review is required to verify that "fair consideration" is given to all the prime contractors. With ESCO-identified projects, all ESCOs have de facto "fair opportunity" to market themselves to federal agency sites, establish relationships, earn agency trust, and build desire at agency sites to partner with them.

The requirements for and exemptions from competition in awarding delivery orders (in IDIQ Sect. H.13) are derived from 41 USC 253 and were added to the statute by FASA changes. The requirements in FAR 16.505 also apply.

4.4.2 Complaint Resolution Process Regarding Fair Opportunity

Delivery orders issued against the Super ESPCs are not subject to protest procedures established for the award of basic contracts. FAR 16.505(b)(4) established that the head of the ordering agency shall designate a Task and Delivery Order Ombudsman (a senior agency official independent of the Contracting Officer) who is responsible for reviewing complaints from contractors on multiple-award task and delivery order contracts and ensuring that all contractors are afforded a fair opportunity to be considered for the issuance of delivery orders. DOE has also designated a DOE Task and Delivery Order Ombudsman.

Initial complaints are addressed by the ordering agency's Ombudsman, who will collect all relevant facts to ensure that all contractors were afforded a fair opportunity to be considered. The Ombudsman will report any determination that corrective action should be taken to the DOE Contracting Officer. Complaints that cannot be resolved by the ordering agency's Ombudsman will be forwarded to the DOE Task Order and Delivery Order Ombudsman.

4.4.3 Developing Technical Specifications and the Site Data Package (SDP)

In an agency-identified project, the agency chooses to define the technical specifications of the project itself and also must manage a competitive process of soliciting and evaluating proposals from several ESCOs. To identify the technical requirements of the project, the agency develops a site data package (SDP) along with the delivery order RFP. Developing the SDP is a significant undertaking and a time-consuming process, but it is required to provide the information that the competing ESCOs need to prepare proposals that can all be evaluated according to the same criteria. The SDP characterizes the present uses and configuration of the site and/or buildings and identifies the technology categories in which the agency will entertain ECM proposals.

The SDP includes historical energy consumption data, utility rate schedules, general site information, building composition, hours of operation, functional requirements (e.g., temperature/humidity set points, lighting levels, etc.), and a complete inventory of energy-consuming equipment and systems. The SDP consists of a narrative, a spreadsheet workbook, and attachments where necessary. A blank spreadsheet workbook as well as an example of a finished narrative and workbook from an actual SDP are available from the FEMP web site at http://www.eren.doe.gov/femp/.

4.4.4 Estimate of Maximum Potential Price

DOE authorization to use the IDIQ is required before the RFP for the delivery order may be issued. The PCO routinely grants approval after verifying that sufficient ordering capacity remains under the IDIQ to cover the proposed delivery order. The agency is required to provide an estimate of the maximum potential price of the delivery order to the PCO for this purpose. (The ESCO's initial proposal in an ESCO-identified project provides this estimate.) Estimating maximum potential price requires preliminary selection of ECMs, estimating of savings and implementation prices, applying maximum markups and financing rates, determining a performance period term that enables savings to exceed contractor payments with some margin for uncertainty, and summing contractor payments over the term to estimate price.

4.4.5 Requirements for Proposal Contents and Evaluation

Requirements for proposal contents for government-identified projects are defined in section H.14 of the IDIQ contracts. These requirements correspond to evaluation criteria in H.15 for evaluating proposals. Both H.14 and H.15 specify the *maximum* requirements anticipated. An agency can require less extensive submissions (and permit more limited evaluation procedures) by indicating in sections H.14 and H.15 of the DO RFP the requirements to replace those in the IDIQ contract.

Agency sites are strongly encouraged to consider the costs to themselves and the ESCOs and the impact on project schedules of specifying overly stringent requirements for proposal contents and evaluation criteria for competitive DO RFPs.

4.4.6 Strategies for Limiting Transaction Costs

The Super ESPCs allow agencies considerable flexibility to define proposal requirements and evaluation criteria that meet their needs. Just a few of the many strategies for limiting transaction costs while complying with the intent of the IDIQ contracts to provide fair consideration to all contractors are to

- limit the scope of the competition (e.g., ask for proposals based on a representative subset of buildings rather than on the entire complex of buildings);
- use oral presentations to narrow the field to two ESCOs prior to submission of written technical and price proposals; and
- for simple projects, limit proposal contents to only a few pages.